Serviceanweisung
Service manual

Ident-Nr. 47 233 00

Manhattan 1100

Inhaltsverzeichnis

Bestellhinweise 2
Ausbauhinweise Chassis/Tieftoner 3

Schaltbild Netzteil/Endstufe 5
Schaltbild HF 6
Schaltbild Klangregelung/Lautstärkepoti 9
Schaltbild Kopfhörerverstärker 10
Schaltbild Laufwerksteuerung Cassette 12
Schaltbild NF-Cassette 14
Schaltbild CD-Player 19

Platinendarstellung Netzteil/Endstufe 4
Platinendarstellung HF, Anzeige 7
Platinendarstellung Bedienteil 8
Platinendarstellung Klangreglerplatine 9
Platinendarstellung Lautstärkepoti 9
Platinendarstellung Kopfhörerverstärker 10
Platinendarstellung Laufwerksteuerung Cassette 13
Platinendarstellung NF Cassette 15
Platinendarstellung CD-Player 18

Abgleichanweisung Tuner 8
Abgleichanweisung Cassette 16
Abgleichanweisung CD-Spieler 27

Verdrahtungstabelle 6
Verdrahtungsplan CD-Player 17
CD-Player IC-Transistor Spannungstabellen
und Blockschaltbilder 20–25
Blockschaltbild CD-Laufwerk 26
Fehlersuchdiagramm CD-Spieler 28

Explosionsdarstellung Chassis kpl. 31
Explosionsdarstellung CD-Mechanik 32
Explosionsdarstellung Cassette 32
Explosionsdarstellung Cassetten-Mechanik 33

Ersatzteilliste Tuner, Verstärker 11
Ersatzteilliste Cassette 16
Ersatzteilliste CD-Player 16
Ersatzteilliste Gehäuse, Lautsprecherbox, Chassis,
CD-Mechanik 30
Ersatzteilliste Cassette/Cassettenmechanik 32

Table of contents

Hints for spare parts order 2
Instructions for dismantling 3

Circuit diagram power supply/output amplifier 5
Circuit diagram HF 6
Circuit diagram tone control, volume poti 9
Circuit diagram headphone amplifier 10
Circuit diagram drive function cassette 12
Circuit diagram AF cassette 14
Circuit diagram CD player 19

P.C.B. diagram power supply/output amplifier 4
P.C.B. diagram RF, indication 7
P.C.B. diagram control unit 8
P.C.B. diagram tone control P.C.B. 9
P.C.B. diagram volume poti 9
P.C.B. diagram headphone amplifier 10
P.C.B. diagram drive control cassette 13
P.C.B. diagram AF cassette 15
P.C.B. diagram CD player 18

Alignment procedure tuner 8
Alignment cassette 16
Alignment CD player 27

Wiring table 6
Wiring diagram CD player 17
CD player, IC transistor voltage chart
and block diagrams 20–25
Block diagram CD mechanism 26
Trouble shooting flowchart 29

Exploded view chassis assembly 31
Exploded view CD mechanism 32
Exploded view cassette 32
Exploded view cassette mechanism 33

Spare parts list tuner, amplifier 11
Spare parts list cassette 16
Spare parts list CD player 16
Spare parts list housing, speaker box, chassis,
CD mechanism 30
Spare parts list cassette/cassette mechanism 32

Bestellhinweise

Hints for spare parts order

Bitte bei Ersatzteilbestellung die genaue Bezeichnung und **Ident-Nr. (siehe Typenschild)** des Gerätes sowie Bestell-Nummer und Positions-Nummer des Ersatzteils angeben.

For ordering of spare parts please state exact description and **ident.-no. of unit (see silver rating label on the backside of unit)** as well as part no. and position no. of required spare parts.

Benutzen Sie/Use:

Telex: 531516

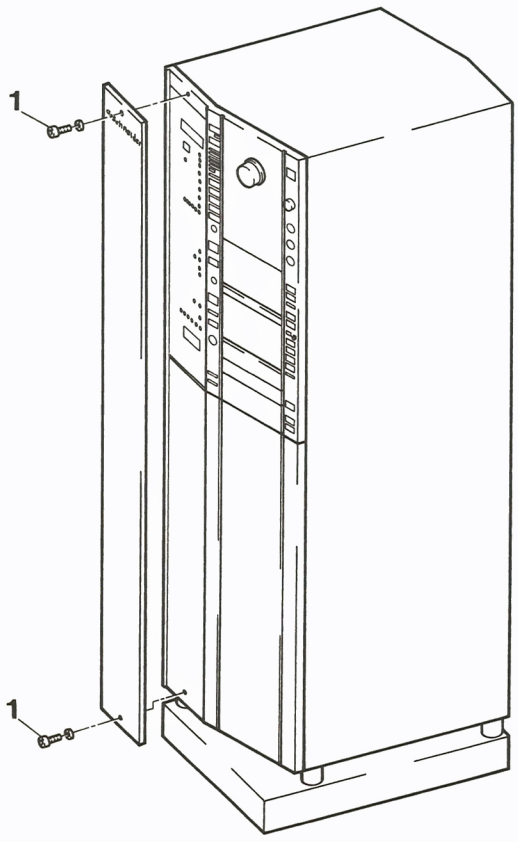
oder

Bildschirmtext * 317298 #

oder

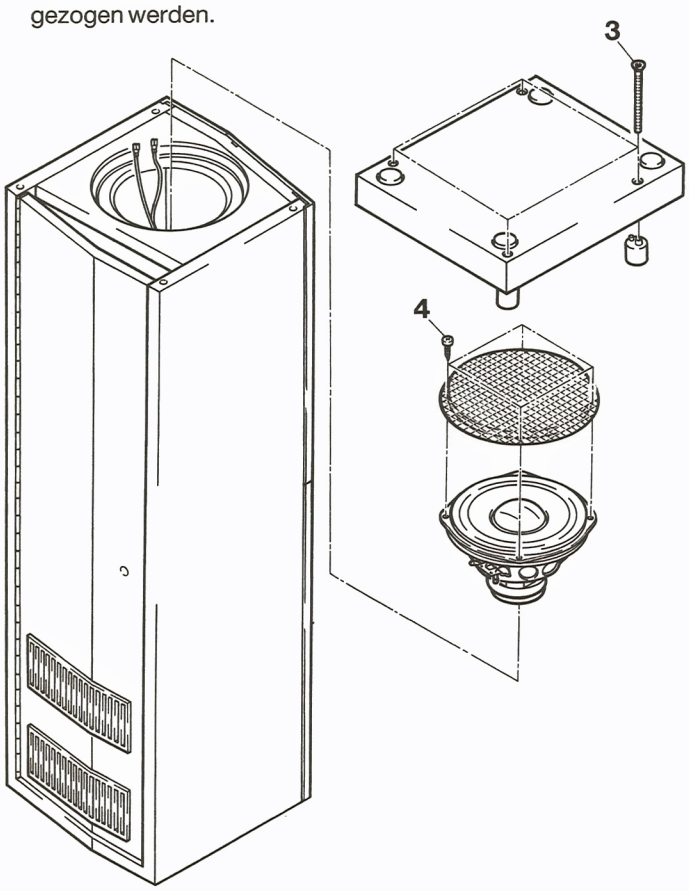
Telefax: 08245/51326

Ausbauhinweise Chassis/Tieftöner

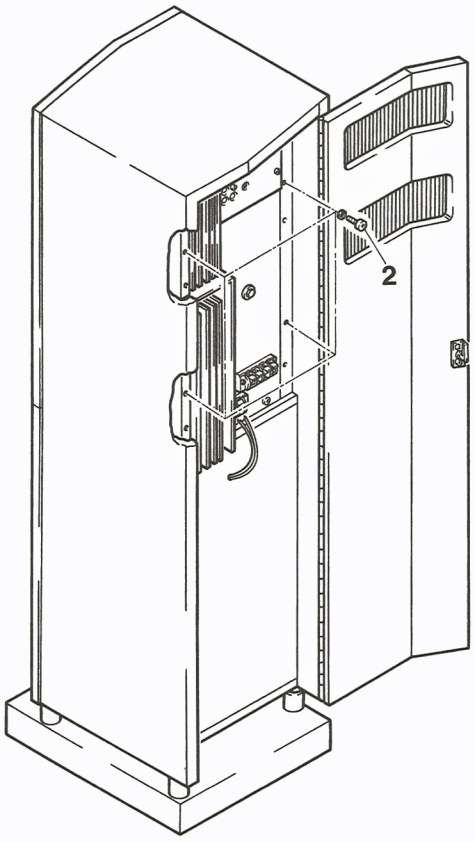


Ausbau des Chassis:

1. Schrauben **1** (2 Stück) auf der Gerätefrontseite entfernen und Glasscheibe abnehmen.
2. Rückwandtür öffnen und Schrauben Nr. **2** (4 Stück) entfernen.
3. Anschlußkabel des Tieftöners aus den Klemmanschlüssen entfernen.
   Danach kann das Chassis nach vorne aus dem Gehäuse gezogen werden.



Instructions for dismantling the chassis/woofer



Dismantling the chassis:

1. Remove the screws **1** (2 ×) in the front of the unit and lift off the glass panel.
2. Open up the rear panel and remove the screws **2** (4 ×).
3. Disconnect the woofer cable from the clamp terminals. The chassis can then be pulled forward out of the housing.

Ausbau des Tieftöners:

Der Tieftöner befindet sich im unteren Teil des Gehäuses.

1. Gerät auf den Kopf stellen.
2. Schrauben Nr. **3** (4 Stück) entfernen, den Sockel und die vier Abstandshalter abnehmen.
3. Schrauben Nr. **4** (4 Stück) entfernen.
   Nach Abnahme des Abdeckgitters ist der Tieftöner nach oben abzunehmen.

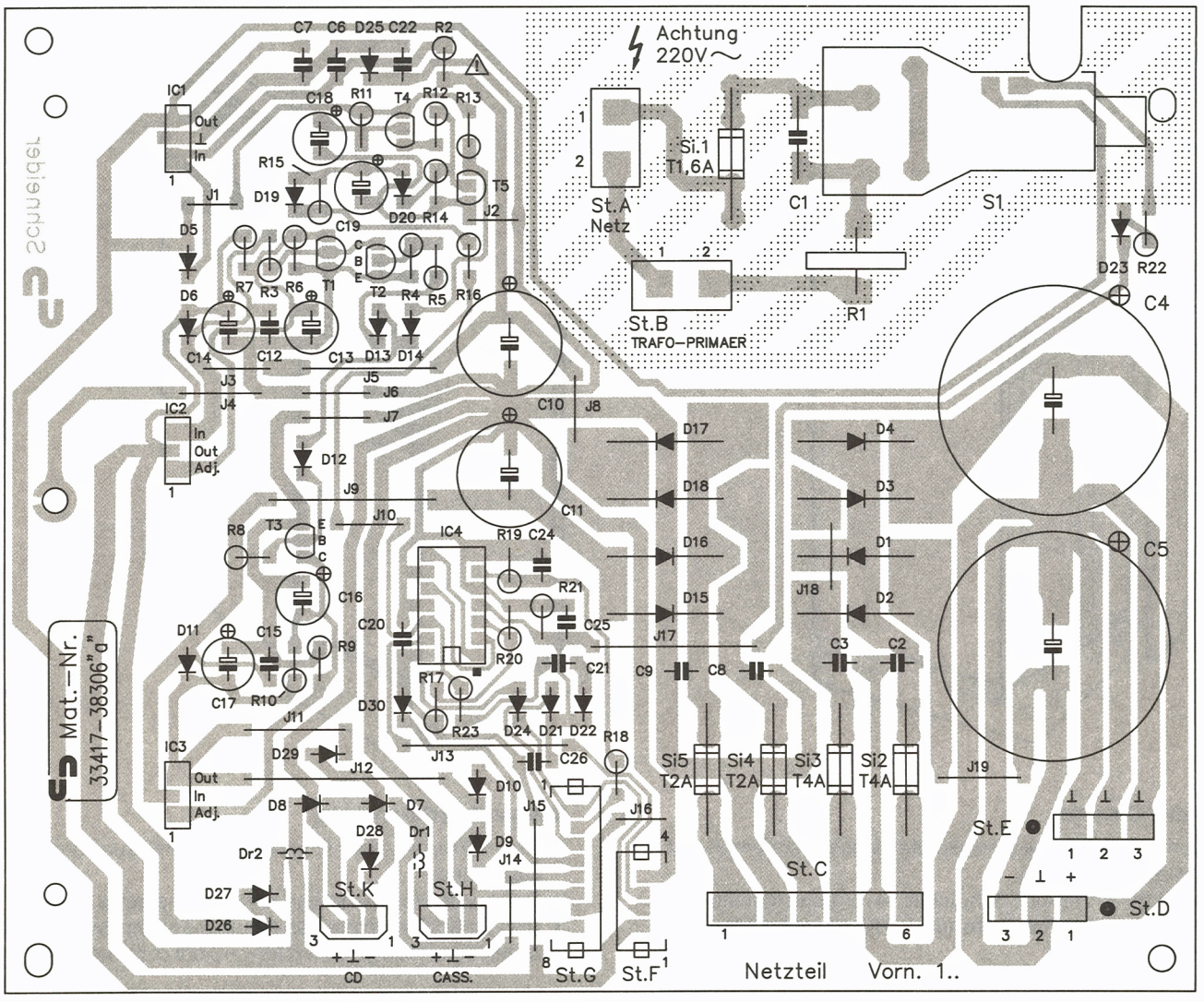
Dismantling the woofer:

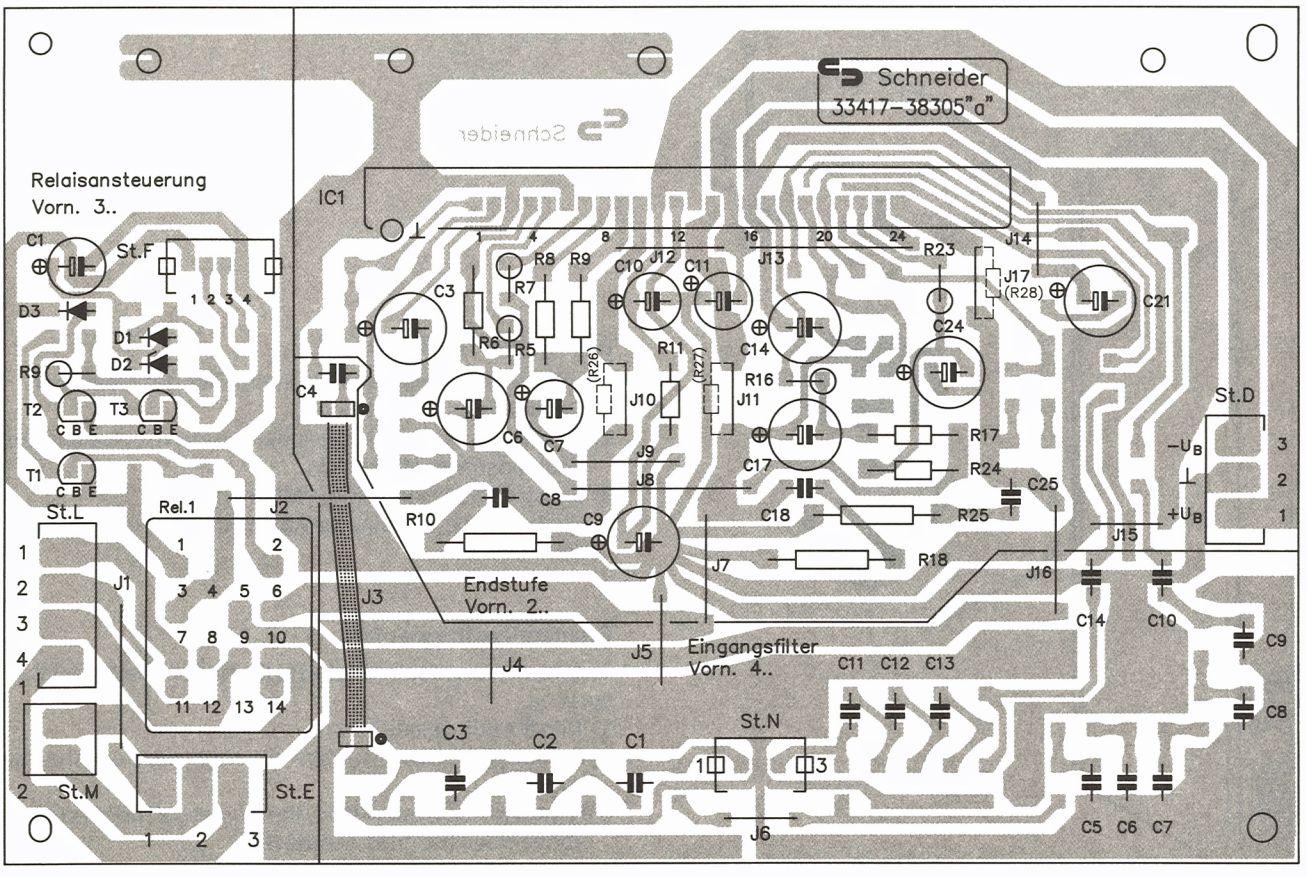
The woofer is accommodated in the bottom section of the housing.

1. Turn the unit upside down.
2. Remove the screws **3** (4 ×); remove the base and the four spacers.
3. Remove the screws **4** (4 ×); the woofer can be lifted out from above when the grille is removed.

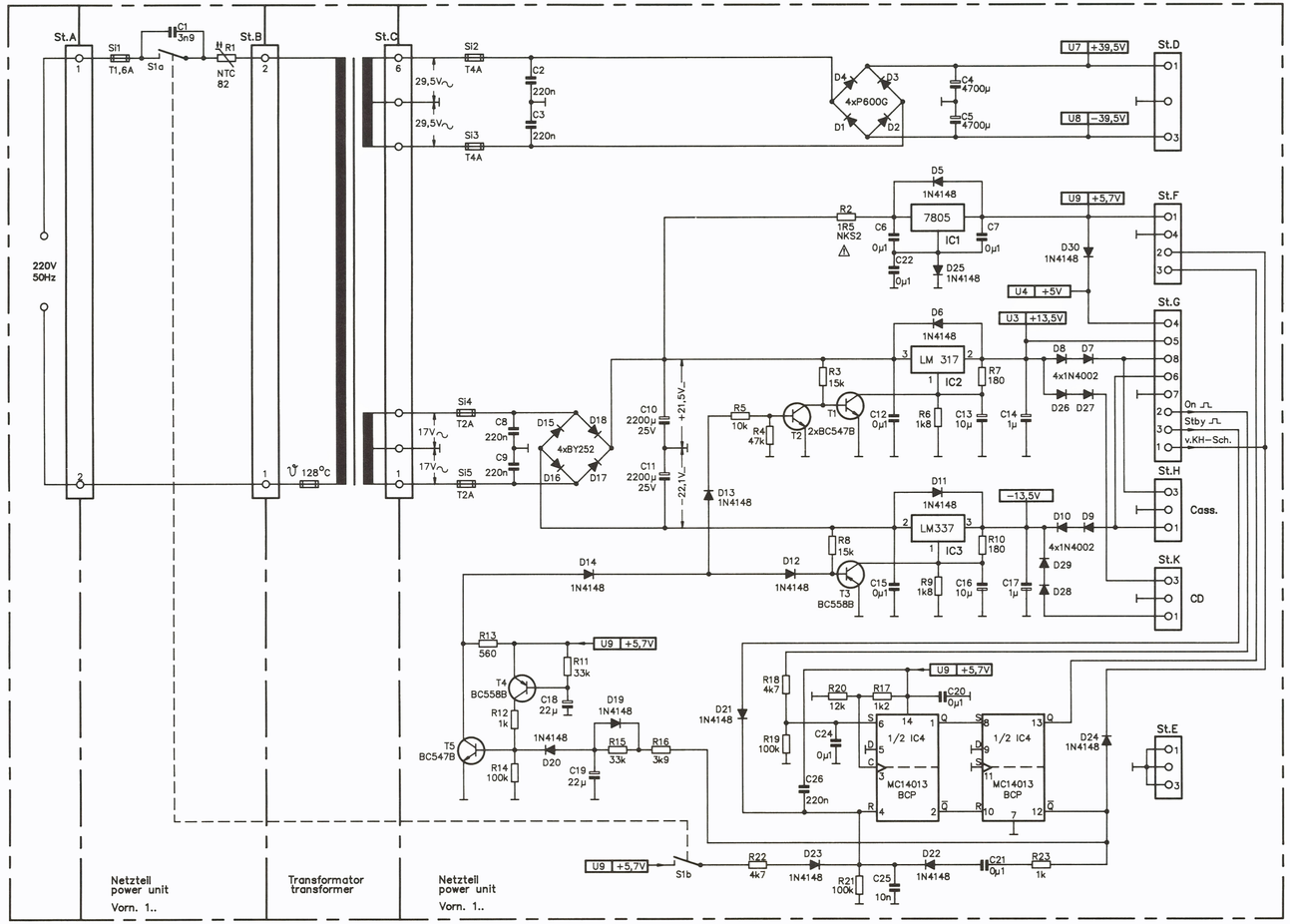
Platinendarstellung Netzteil/Endstufe

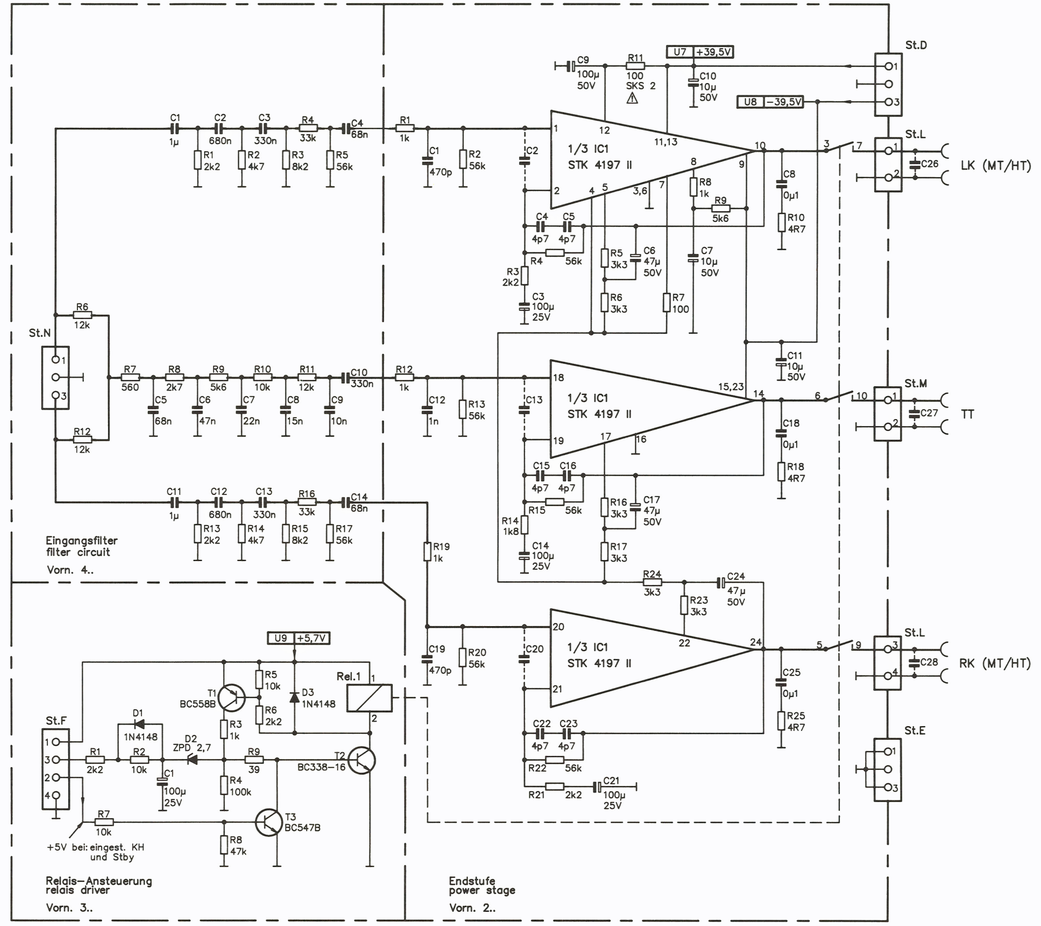
P.C.B. diagram power supply/output amplifier





Schaltbild Netzteil/Endstufe
Circuit diagram power supply/output amplifier





STK 4197 II
Stereo Amplifier

STK 4197 II
IC 201

Pin: 1.Input 2.Ground 3.Output
7805
IC 101

Pin: 1.Adjust 2.Output 3.Input
LM317
IC 102

Pin: 1.Adjust 2.Input 3.Output
LM337
IC 103

BC 338–16
BC 547B
BC 558B
T302
T101/102/105/303
T103/104/301

MC 14013BCP
IC 104

Bottom View
MY 4–02–6VDC
Rel.301

Schaltbild HF
Circuit diagram RF

⚠ = Sicherheitsbauteile sind unbedingt durch Originalteile zu ersetzen

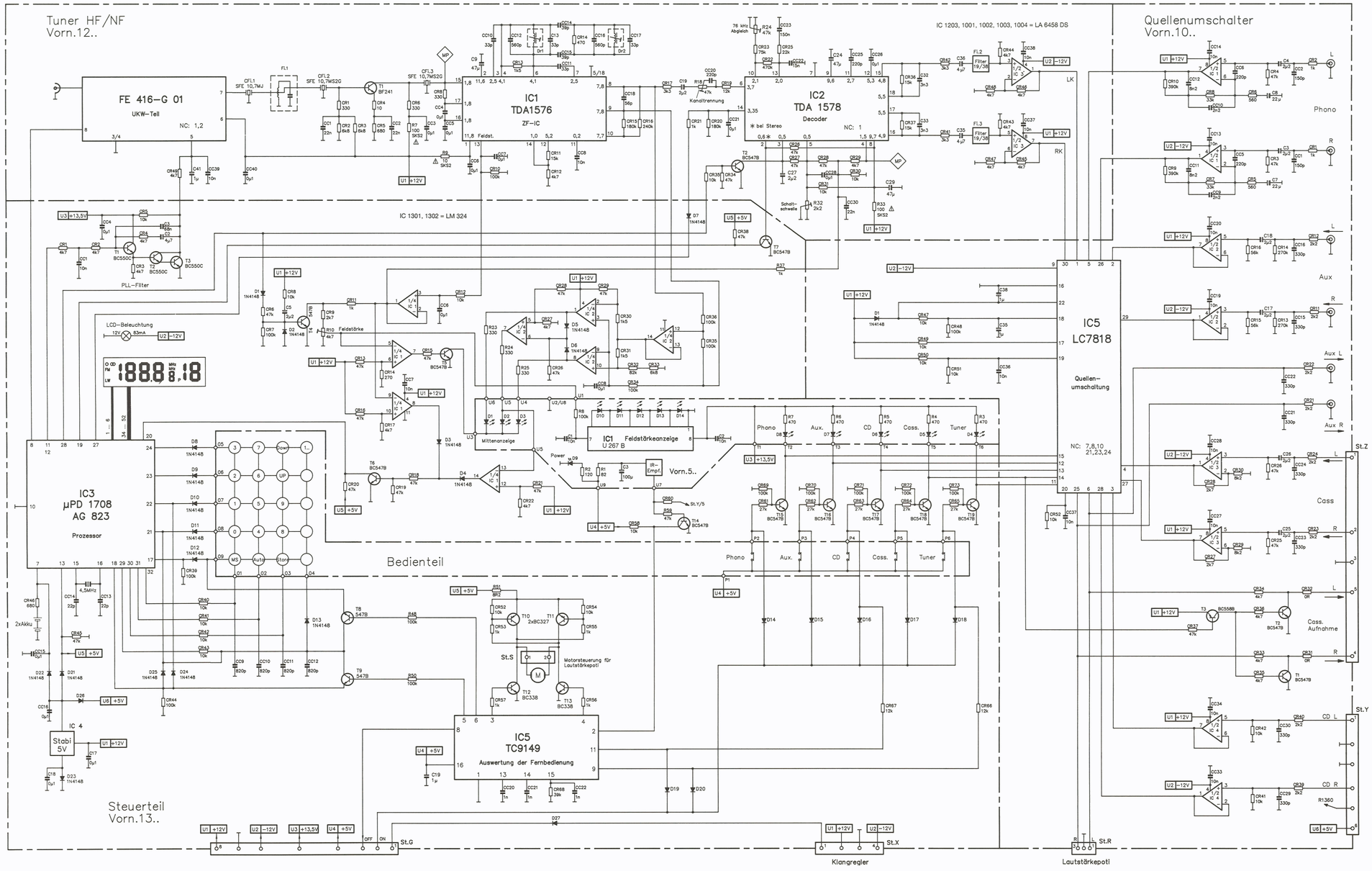
⚠ = Please use original spare parts only

Verdrahtungstabelle

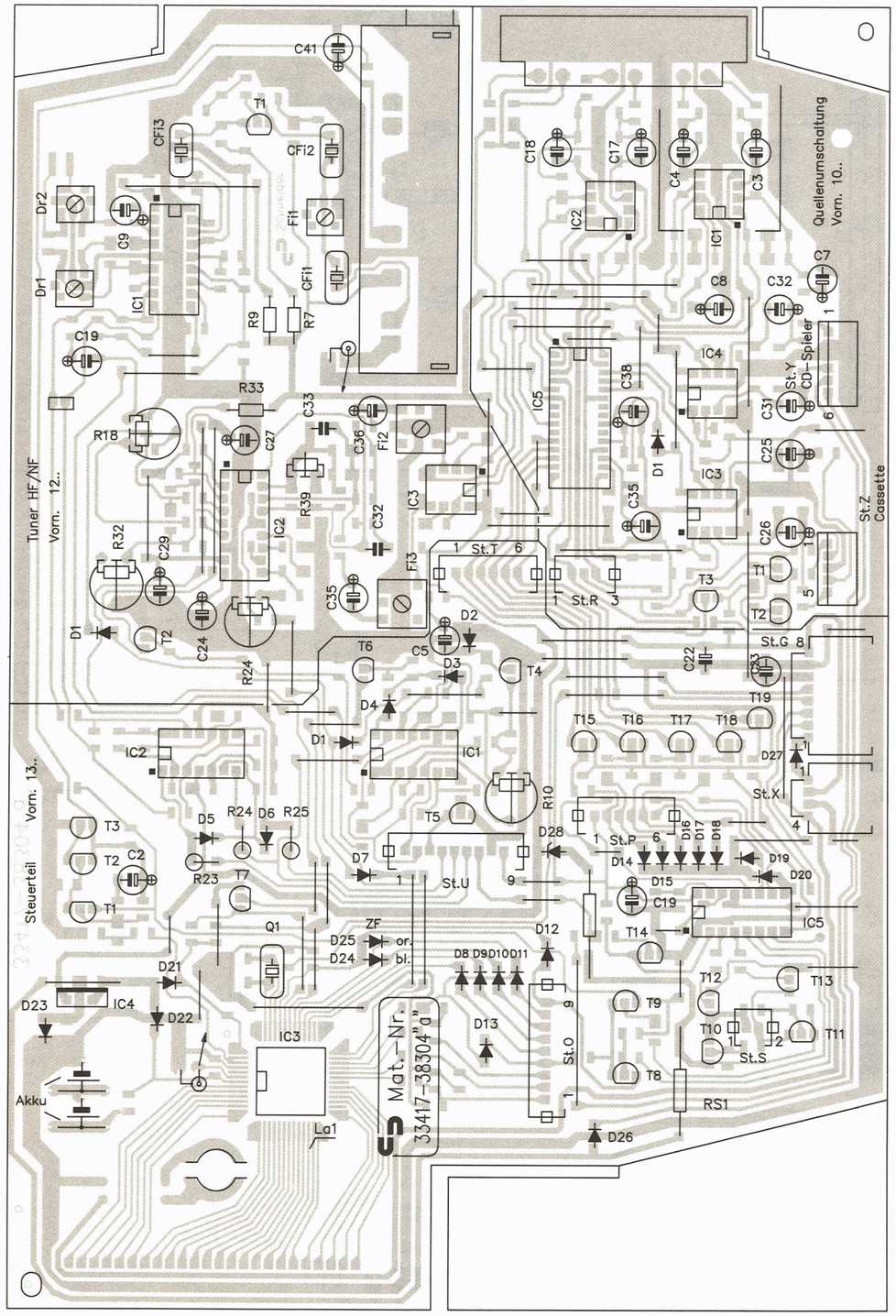
Stecker	von		nach
A	Netzkabel	⟷	Netzteil-LP
B	Netzteil-LP	⟷	Trafo, primär
C	Trafo, sekundär	⟷	Netzteil-LP
D	Netzteil-LP	⟷	Endstufen-LP (Endstufen-Versorgung)
E	Netzteil-LP	⟷	Endstufen-LP (Lautsprecher-Masse)
F	Netzteil-LP	⟷	Endstufen-LP (Relais-Ansteuerung)
G	Netzteil-LP	⟷	HF-LP (Versorgung + Steuerimpulse)
H	Netzteil-LP	⟷	Cassettenrecorder (Versorgungsspannung)
K	Netzteil-LP	⟷	Compact-Disc-Player (Versorgungsspannung)
L	Endstufen-LP	⟷	Lautsprecherterminal-Mittel/Hochton, L&R
M	Endstufen-LP	⟷	Lautsprecherterminal-Tiefton (TT)
N	Klangregler-LP	⟷	Endstufen-LP (Signal)
O	Bedienteil-LP	⟷	HF-LP (Prozessor)
P	Bedienteil-LP	⟷	HF-LP (Quellenumschaltung)
Q	Lautstärkepoti-LP	⟷	Klangregler (NF)
R	Lautstärkepoti-LP	⟷	HF-LP (NF)
S	Lautstärkepoti-LP	⟷	HF-LP (Motor-Versorgungsspannung)
T	Anzeige-LP	⟷	HF-LP (Quellenanzeige)
U	Anzeige-LP	⟷	HF-LP (Mittenanzeige, IR, Feldstärke)
V	Kopfhörer-LP	⟷	Klangregler-LP (NF)
W	Kopfhörer-LP	⟷	Klangregler-LP (Versorgungsspannung, Mute)
X	Klangregler-LP	⟷	HF-LP (Versorgungsspannung, Mute)
Y	CD-Spieler	⟷	HF-LP (CD-NF, IR, +5 V)
Z	Cassette	⟷	HF-LP (NF)

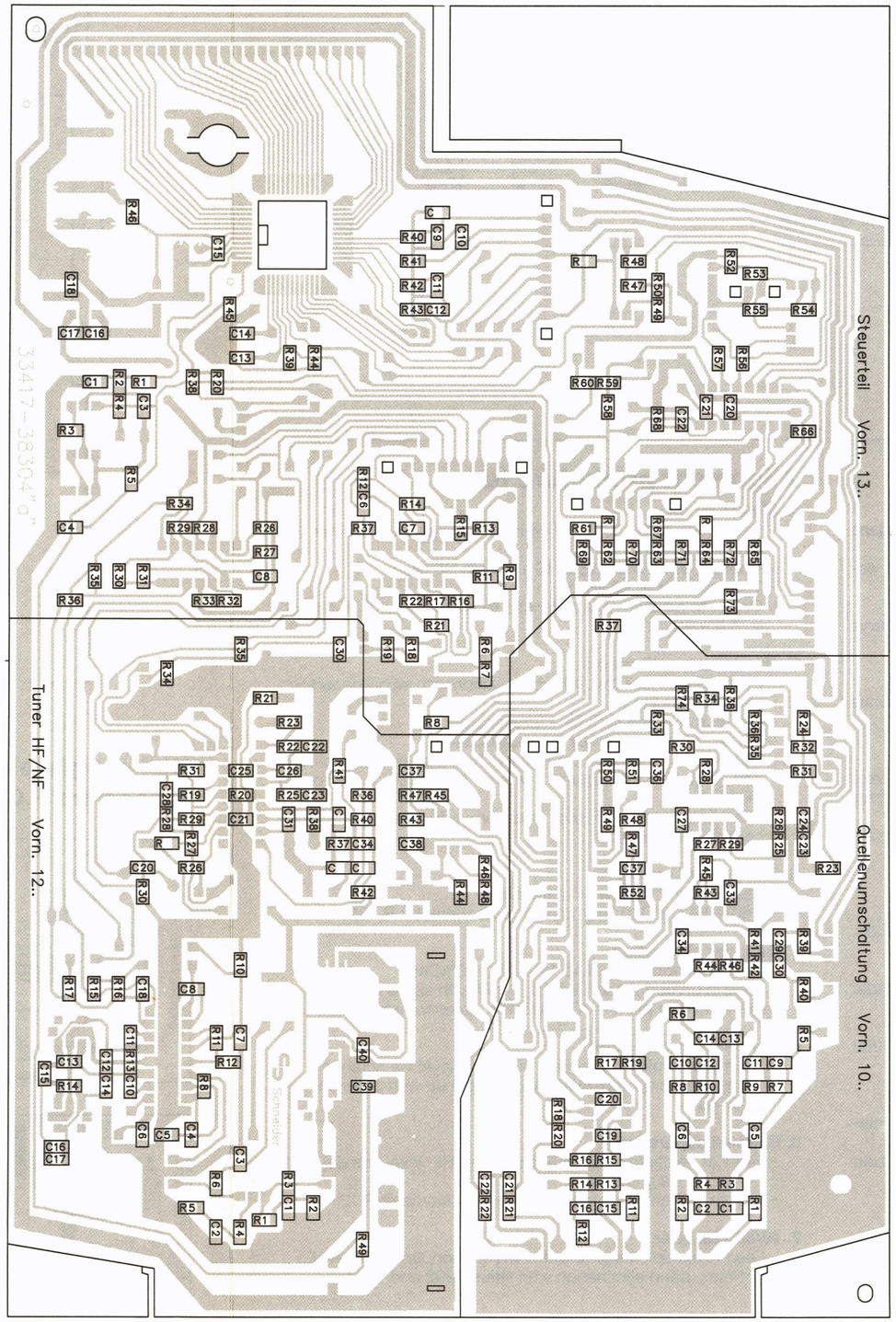
Wiring table

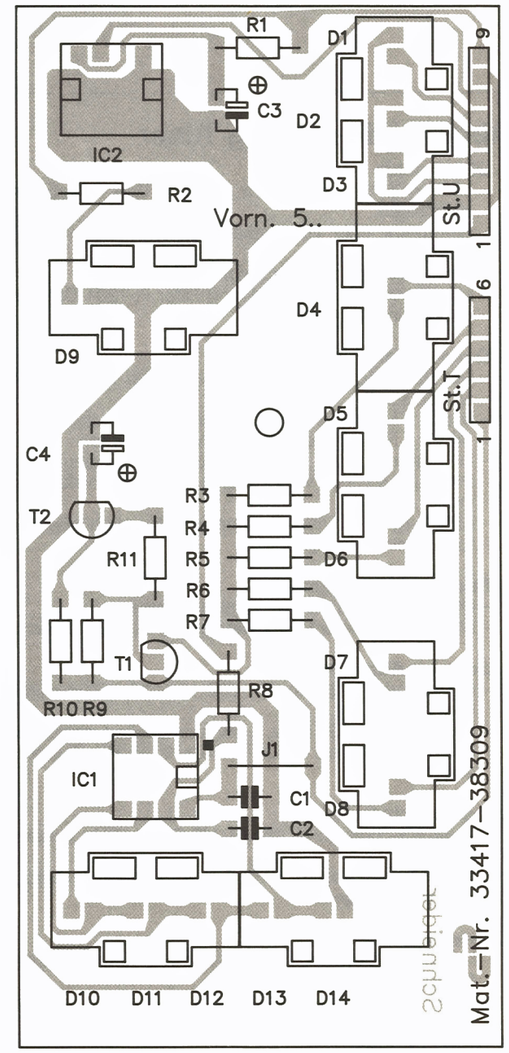
Pin	from		to
A	Power cable	⟷	Power supply P.C.B.
B	Power supply P.C.B.	⟷	Transformer primary
C	Transformer secondary	⟷	Power supply P.C.B.
D	Power supply P.C.B.	⟷	Output amplifier P.C.B. (supply)
E	Power supply P.C.B.	⟷	Output amplifier P.C.B. (speaker ground)
F	Power supply P.C.B.	⟷	Output amplifier P.C.B. (relay)
G	Power supply P.C.B.	⟷	Output amplifier P.C.B. (supply + control pulse)
H	Power supply P.C.B.	⟷	Cassette (supply)
K	Power supply P.C.B.	⟷	CD player (supply)
L	Output amplifier P.C.B.	⟷	Speaker terminal (tweeter/middle)
M	Output amplifier P.C.B.	⟷	Speaker terminal (woofer)
N	Tone control P.C.B.	⟷	Output amplifier (signal)
O	Control P.C.B.	⟷	RF P.C.B. (processor)
P	Control P.C.B.	⟷	RF P.C.B. (Mode selection)
Q	Volume poti P.C.B.	⟷	Tone control P.C.B. (AF)
R	Volume poti P.C.B.	⟷	RF P.C.B. (AF)
S	Volume poti P.C.B.	⟷	RF P.C.B. (Motor supply)
T	Indication P.C.B.	⟷	RF P.C.B. (Mode indication)
U	Indication P.C.B.	⟷	RF P.C.B. (Tuning, IR, Signal)
V	Headphone amplifier P.C.B.	⟷	Tone control P.C.B. (AF)
W	Headphone amplifier P.C.B.	⟷	Tone control P.C.B. (supply, mute)
X	Tone control P.C.B.	⟷	RF P.C.B. (supply, mute)
Y	CD player	⟷	RF P.C.B. (CD-AF, IR +5 V)
Z	Cassette	⟷	RF P.C.B. (AF)



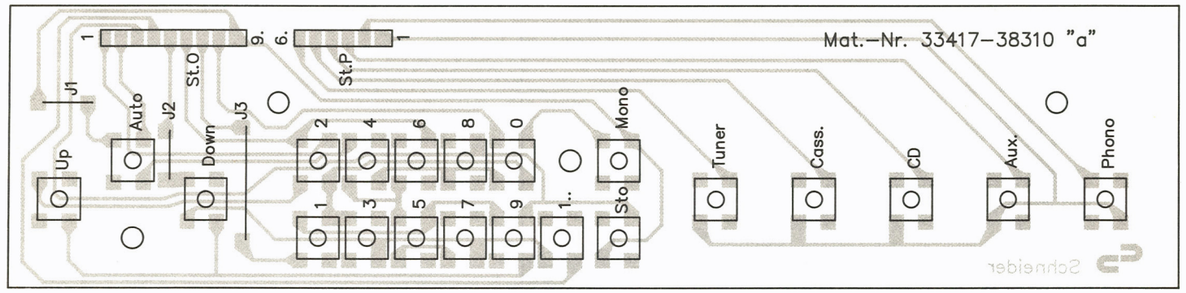
Platinendarstellung HF, Anzeige
P.C.B. diagram RF, indication







Platinendarstellung Bedienteil
P.C.B. diagram control unit



Abgleichanweisung Tuner

1. ZF-Abgleich
- Mit Wobbelsender 96 MHz, 56 dBµV über Antenneneingang einspeisen.
- Sichtgerät über HF-Tastkopf an Pin 15 von IC 1201 anschließen.
- Empfänger auf 96 MHz abstimmen.
- Mit ZF-Kreis im UKW-Teil und Filter Fi 1201 Durchlaßkurve auf Maximum abgleichen.

2. Quadraturabgleich
- Mit Meßsender 96 MHz, 1 mV, 40 kHz Hub über Antenne einspeisen.
- Mit Dr 1 NF-Maximum einstellen (Vorabgleich).
- Mit Dr 2 NF-Minimum einstellen (Vorabgleich).
- Dr 1 und Dr 2 so abgleichen, daß DC-Spannung zwischen Pin 8 und 9 von IC 1202 gleich 0 V und NF-Klirrfaktor minimal ist.
- Mit ZF-Kreis im UKW-Teil und Fi 1201 anschließend Klirrfaktorminimum einstellen.

3. Feldstärkeeinstellung
- Über Antenne 5 mV HF-Pegel einspeisen.
- Mit Potentiometer R 1310 letzte LED zum Leuchten bringen.

4. Decoder-Abgleich
- Pin 4 und Pin 8 von IC 1202 über 10 kOhm miteinander verbinden.
- Mit Meßsender 96 MHz, 1 mV, unmoduliert einspeisen.
- Mit Potentiometer R 1224 76 kHz an Pin 4 von IC 1202 einstellen.

5. Stereo-Schaltschwelle
- Multiplex-Signal mit 10 µV HF-Pegel über Antenne einspeisen.
- Mit Potentiometer R 1232 Stereo-Symbol im Display zum Leuchten bringen.

6. Kanaltrennung
- Multiplex-Signal mit 1 mV HF-Pegel, L-Kanal moduliert über Antenne einspeisen.
- Mit Potentiometer R 1218 max. Kanaltrennung einstellen.

7. 19/38 kHz-Filter
- Multiplex-Signal mit 1 mV HF-Pegel unmoduliert einspeisen.
- Mit Filter Fi 1202 und Fi 1203 max. Sperrtiefe einstellen.

Alignment procedure tuner

1. IF calibration
- Feed in 96 MHz, 56 dBµV with sweep signal transmitter via antennae input.
- Connect VDU to pin 15 of IC 1201 via HF probe.
- Tune receiver to 96 MHz.
- Calibrate on-state characteristic to maximum with IF circuit in VHF section.

2. Quadrature calibration
- Feed in 96 MHz, 1 mV, 40 kHz deviation with signal generator via antennae input.
- Set AF maximum with Dr 1 (precalibration).
- Set AF minimum with Dr 2 (precalibration).
- Calibrate Dr 1 and Dr 2 so that DC voltage between pins 8 and 9 of IC 1202 equals 0 V and AF distortion factor is minimal.
- Then set distortion factor minimum with IF circuit in VHF section and filter 1201.

3. Setting field strength
- Feed in 5 mV HF level via antennae.
- Cause last LED to light up with potentiometer R 1310.

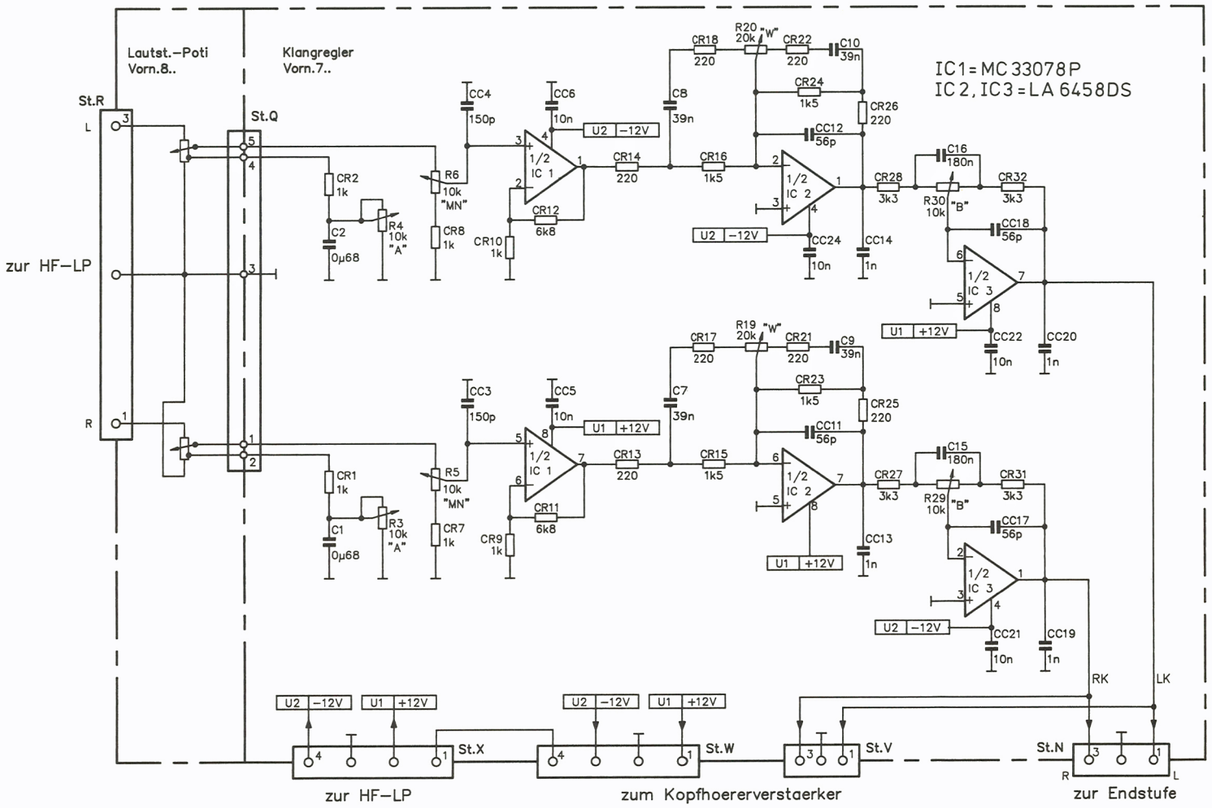
4. Decoder calibration
- Link pin 4 and pin 8 of IC 1202 with 10 kOhm.
- Feed in unmodulated 96 MHz, 1 mV with signal generator.
- Set 76 kHz at pin 4 of IC 1202 with potentiometer R 1224.

5. Stereo operating point
- Feed in multiplex signal with 10 µV HF level via antennae.
- Cause stereo symbol in displasy to light up with potentiometer R 1232.

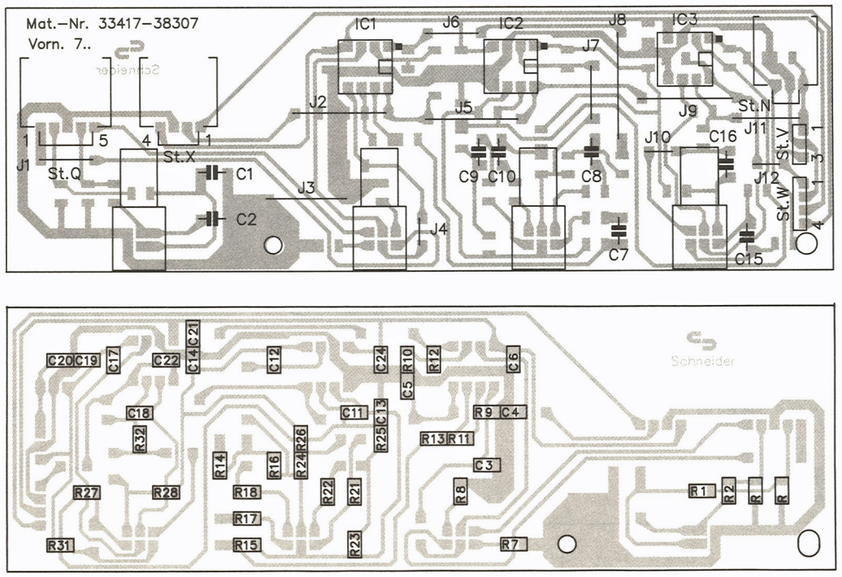
6. Channel separation
- Feed in multiplex signal with 1 mV HF level, modulated L channel via antennae.
- Set max. channel separation with potentiometer R 1218.

7. 19/38 kHz filter
- Feed in multiplex signal with 1 mV unmodulated HF level.
- Set max. band elimination with filters 1202 and 1203.

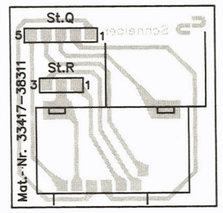
Schaltbild Klangregelung
Circuit diagram tone control



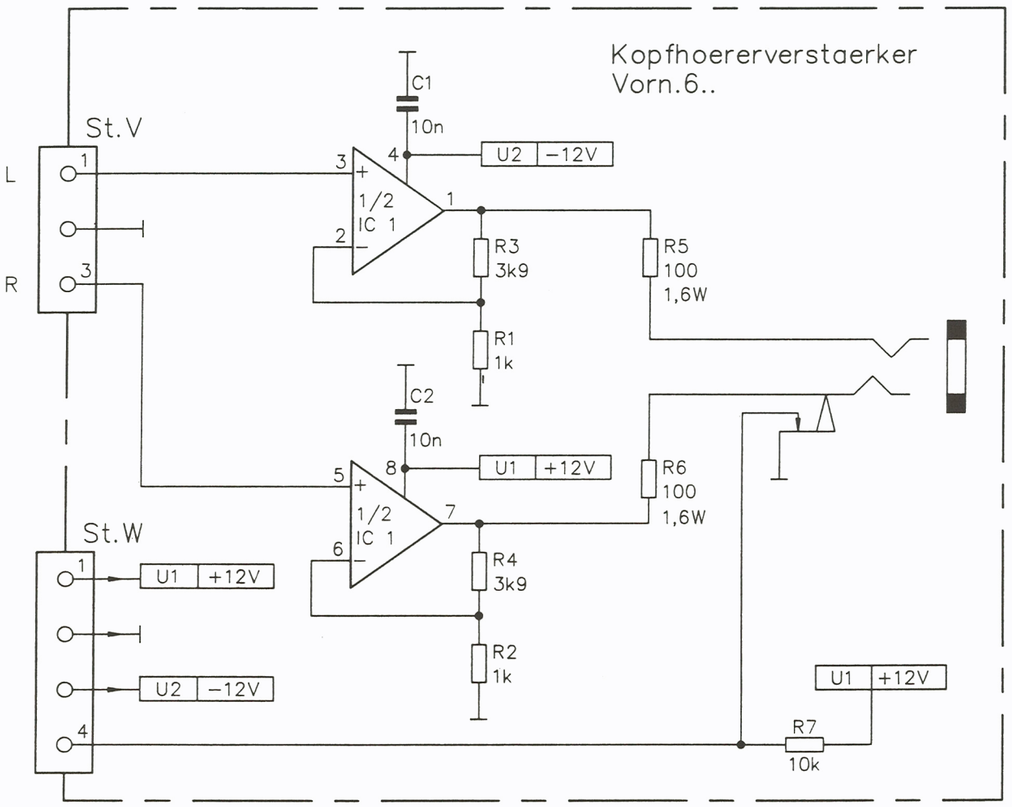
Klangreglerplatine
Tone control P.C.B.



Lautstärkepoti kpl.
Volume poti assembly

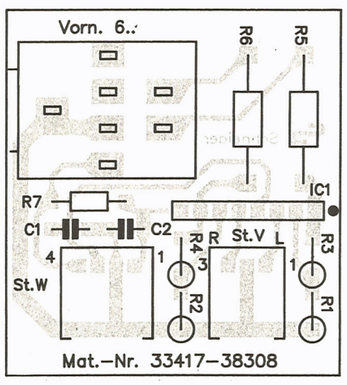


Schaltbild Kopfhörerverstärker
Circuit diagram headphone amplifier



IC 1 = M 5216 L

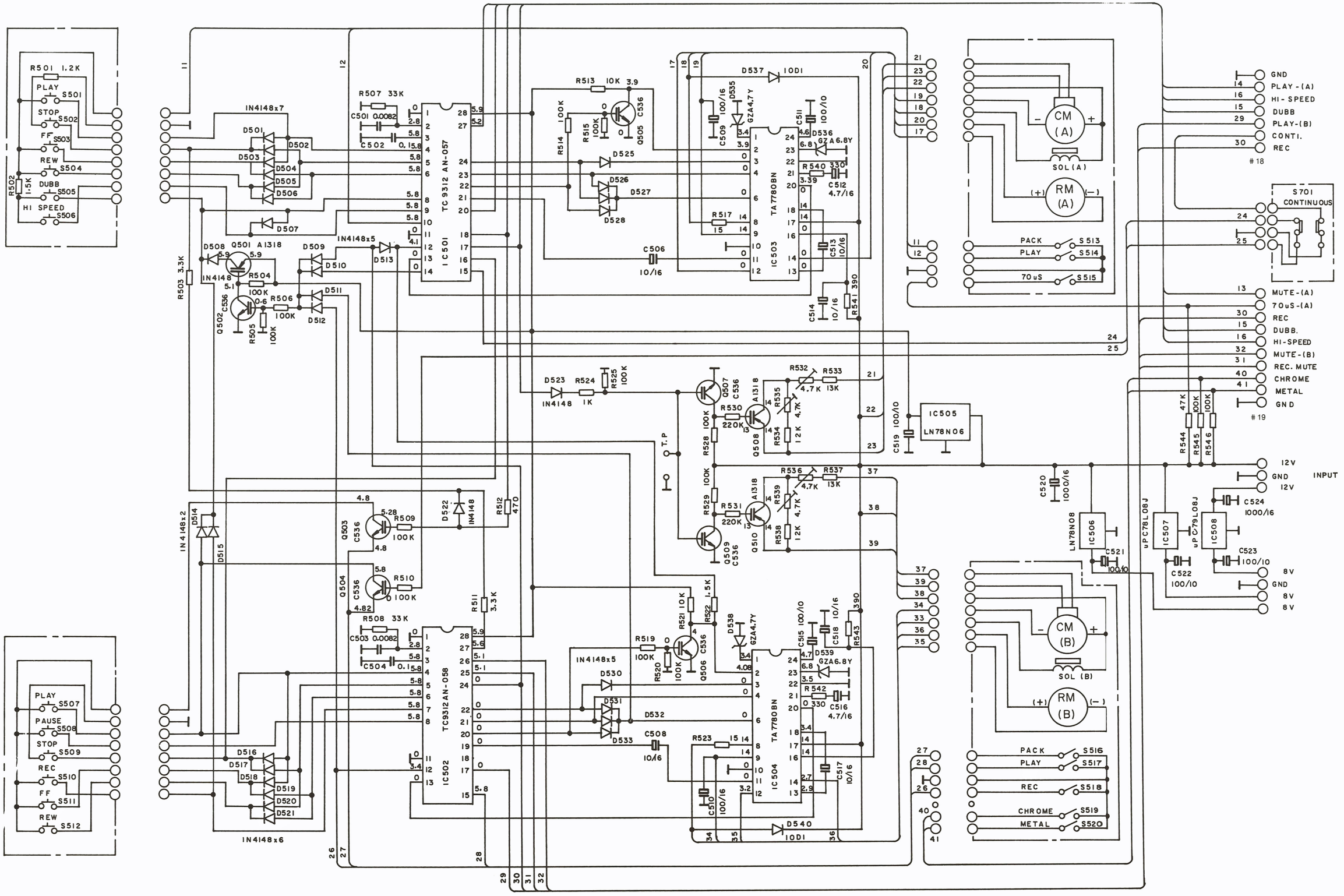
Platine Kopfhörerverstärker
P.C.B. headphone amplifier



Ersatzteilliste Tuner, Verstärker
Spare parts list tuner, amplifier

Best.-Nr. Part.-No.	Bezeichnung	Description	Position	Preisgruppe Price key
39 203 00	**Netzteil-Platine**	**Power supply P.C.B.**	**B 1**	**F 1**
23 964 00	Transistor BC 547 B T092	Transistor BC 547 B T092	T 101/102, 105	A 4
23 965 00	Transistor BC 558 B T092	Transistor BC 558 B T092	T 103/104	A 4
23 703 00	Diode BY 252	Diode BY 252	D 115-118	A 3
31 159 00	Diode P 600 G	Diode P 600 G	D 101-104	A 6
38 541 00	Diode 1 N 4148	Diode 1 N 4148	D 105...	A 0
31 729 00	Diode 1 N 4002	Diode 1 N 4002	D 107...	A 2
02 419 00	IC HBF 14013A Flip-Flop	IC HBF 14013A Flip-Flop	IC 104	A 7
23 110 00	IC LM 317 Stabi 1,2-37 V	IC LM 317 Stabi 1.2-37 V	IC 102	B 1
23 701 00	IC 7805 1,5 A 5 V Stabi	IC 7805 1.5 A 5 V Stabi	IC 101	B 1
38 289 00	IC LM 337 T	IC LM 337 T	IC 103	A 7
23 884 00	Elko Rad. 4700/50	Electrolyt capacitor 4700/50	C 104/105	B 9
23 999 00	Widerstand NTC 82 Ohm	NTC resistor 82 Ohm	R 101	B 6
38 453 00	Sicherungs-Widerstand 1,5 Ohm	Fuse resistor 1.5 Ohm	R 102	A 2
38 273 00	Netzschalter	Power switch	S 101	B 3
23 918 00	Montageclip	Mounting clip		A 1
18 345 00	**Ringkerntrafo**	**Power transformer**	**B 2**	**F 2**
39 177 00	**Endstufen-Platine**	**Output amplifier P.C.B.**	**B 3**	**F 5**
38 328 00	IC STK 4197 Hybrid	IC STK 4197 Hybrid	IC 201	E 1
03 975 00	Transistor BC 338 B	Transistor BC 338 B	T 302	A 4
23 964 00	Transistor BC 547 B T092	Transistor BC 547 B T092	T 303	A 4
23 965 00	Transistor BC 558 B T092	Transistor BC 558 B T092	T 301	A 4
38 541 00	Diode 1 N 4148	Diode 1 N 4148	D 301/303	A 0
38 343 00	Zenerdiode ZPD 2,7	Zenerdiode ZPD 2.7	D 302	A 1
23 433 00	Metaloxid-Widerstand 4,7 Ohm 1 Watt	Resistor 4.7 Ohm 1 Watt	R 210, 218, 225	A 1
06 419 00	Sicherungs-Widerstand 100 Ohm	Fuse resistor 100 Ohm	R 211	A 6
38 342 00	Relais	Relay	RE 301	C 4
39 226 00	**LS-Buchsen 4fach**	**LS jack 4-set**	**B 4**	**B 6**
39 269 00	**LS-Buchsen 2fach**	**LS jack 2-set**	**B 5**	**B 3**
39 173 00	**HF-Platine**	**RF P.C.B.**	**B 6**	**G 1**
03 975 00	Transistor BC 338 B	Transistor BC 338 B	T 1312/1313	A 4
23 964 00	Transistor BC 547 B T092	Transistor BC 547 B T092	T 1301-1309...	A 4
31 318 00	Transistor BC 550	Transistor BC 550	T 1301-1303	A 1
31 810 00	Transistor BF 241	Transistor BF 241	T 1201	A 2
38 327 00	Transistor BC 327-16	Transistor BC 327-16	TS 1310/1311	A 2
23 951 00	Diode 1 N 4148	Diode 1 N 4148	D 1302...	A 2
31 463 00	Diode 1 N 4148 (A)	Diode 1 N 4148 (A)	D 1301...	A 1
38 274 00	IC UPD 1708	IC UPD 1708		C 9
06 976 00	IC LM 324 N 4fach OP	IC LM 324 N 4-set OP	IC 1301/1302	B 0
15 107 00	IC TDA 1578 A Stereo-Decoder	IC TDA 1578 A Stereo decoder	IC 1202	C 1
23 257 00	IC LA 6458 DS Dual OP ***231150	IC LA 6458 DS Dual OP ***231150	IC 1002-1004, 1203	A 9
23 701 00	IC 7805 1,5 A 5 V Stabi	IC 7805 1.5 A 5 V Stabi	IC 1304	B 1
38 077 00	IC TDA 1576 FM-ZF	IC TDA 1576 FM-ZF	IC 1201	B 8
38 277 00	IC TC 9149	IC TC 9149	IC 1305	B 7
38 278 00	IC LC 7818	IC LC 7818	IC 1005	B 9
06 419 00	Sicherungs-Widerstand 100 Ohm	Fuse resistor 100 Ohm	R 1207/1233	A 6
23 047 00	Sicherungs-Widerstand 10 Ohm	Fuse resistor 10 Ohm	R 1209	A 2
01 255 00	Trimmpoti 50 k/47 kOhm lieg.	Variable resistor 50 k/47 kOhm	R 1218/1224	A 2
01 256 00	Trimmpoti 5 k/4,7 kOhm lieg.	Variable resistor 5 k/4.7 kOhm	R 1310	A 4
01 592 00	Trimmpoti 2,5 k/2,2 kOhm lieg.	Variable resistor 2.5 k/2.2 kOhm	R 1232	A 4
23 423 00	Filter LPF-V10A1	Filter LPF-V10A1	Fi 1202/1203	A 9
38 280 00	Filter FM-ZF 10,7 MHz	Filter FM-ZF 10.7 MHz	Fi 1201	A 5
38 082 00	Spule Quadratur	Coil	Dr 1201/1202	A 3
23 872 00	Keramik-Filter SFE 10,7	Ceramic filter SFE 10.7	CFi 1201	A 4
38 282 00	Keramik-Filter SFE 10,7	Ceramic filter SFE 10.7	CFi 1202/1203	A 3
38 102 00	Quarz 4,5 MHz	X-tal 4.5 MHz	Q 1	A 8
38 285 00	Tuner-UKW FE 416	Tuner UKW FE 416		D 5
38 284 00	LCD-Display	LCD display		C 5
38 283 00	Lampe mit Fassung für LCD	Lamp LCD		A 6
15 122 00	Akkumulator 60 DK Ni-Cd 1,2 V	Accumulator 60 DK Ni-Cd 1.2 V		B 4
38 266 00	Chinch-Buchse 6fach	Chinch jack 6-set		B 3
39 166 00	**Klangregler-Platine**	**Tone control P.C.B.**	**B 7**	**E 0**
23 257 00	IC LA 6458 DS Dual-OP	IC LA 6458 DS Dual-OP	IC 702/703	A 9
31 961 00	IC MC 33078 P	IC MC 33078 P	IC 701	A 6
38 269 00	Drehwiderstand Loudness	Rotary resistor loudness	R 703/704	B 6
38 270 00	Drehwiderstand Balance	Rotary resistor balance	R 705/706	B 6
38 271 00	Drehwiderstand Treble	Rotary resistor treble	R 719/720	B 6
38 272 00	Drehwiderstand Bass	Rotary resistor bass	R 729/730	B 6
39 159 00	**Lautstärkepoti kompl. mit Platine**	**Volume poti assembly with P.C.B.**	**B 8**	**C 9**
39 160 00	**Kopfhörerverstärker-Platine**	**Headphone amplifier P.C.B.**	**B 9**	**C 3**
38 320 00	IC M 5216 L	IC M 5216 L	IC 601	A 9
23 970 00	Buchse Klinken Kopfhörer	Headphone jack		A 9
39 158 00	**Bedienteil-Platine Tuner**	**Control P.C.B. tuner**	**B 10**	**C 6**
23 366 00	Taste KHH 10908	Push switch		A 4
38 462 00	**CD-Bedienteil-Platine 1 Repeat/Memory**	**Control P.C.B. CD-1 Repeat/Memory**	**B 11**	**B 4**
23 366 00	Taste KHH 10908	Push switch		A 4
38 463 00	**CD-Bedienteil-Platine 2 Play/Pause**	**Control P.C.B. CD-2 Play/Pause**	**B 12**	**B 4**
23 366 00	Taste KHH 10908	Push switch		A 4
39 157 00	**Anzeige-Platine**	**Indication P.C.B.**	**B 13**	**D 4**
11 952 00	IC U 267 B	IC U 267 B	IC 501	B 3
38 302 00	IC IR-Empfänger	IC IR-receiver	IC 502	B 7
38 298 00	Leuchtdiode LN 250 RPH rot	LED LN 250 red	D 502	A 3
38 299 00	Leuchtdiode LN 450 YPH gelb	LED LN 450 yellow		A 3
38 303 00	Halter LED	Holder LED		A 2
27 721 00	**Display CDP 1100**	**Display CDP 1100**	**B 14**	**D 9**

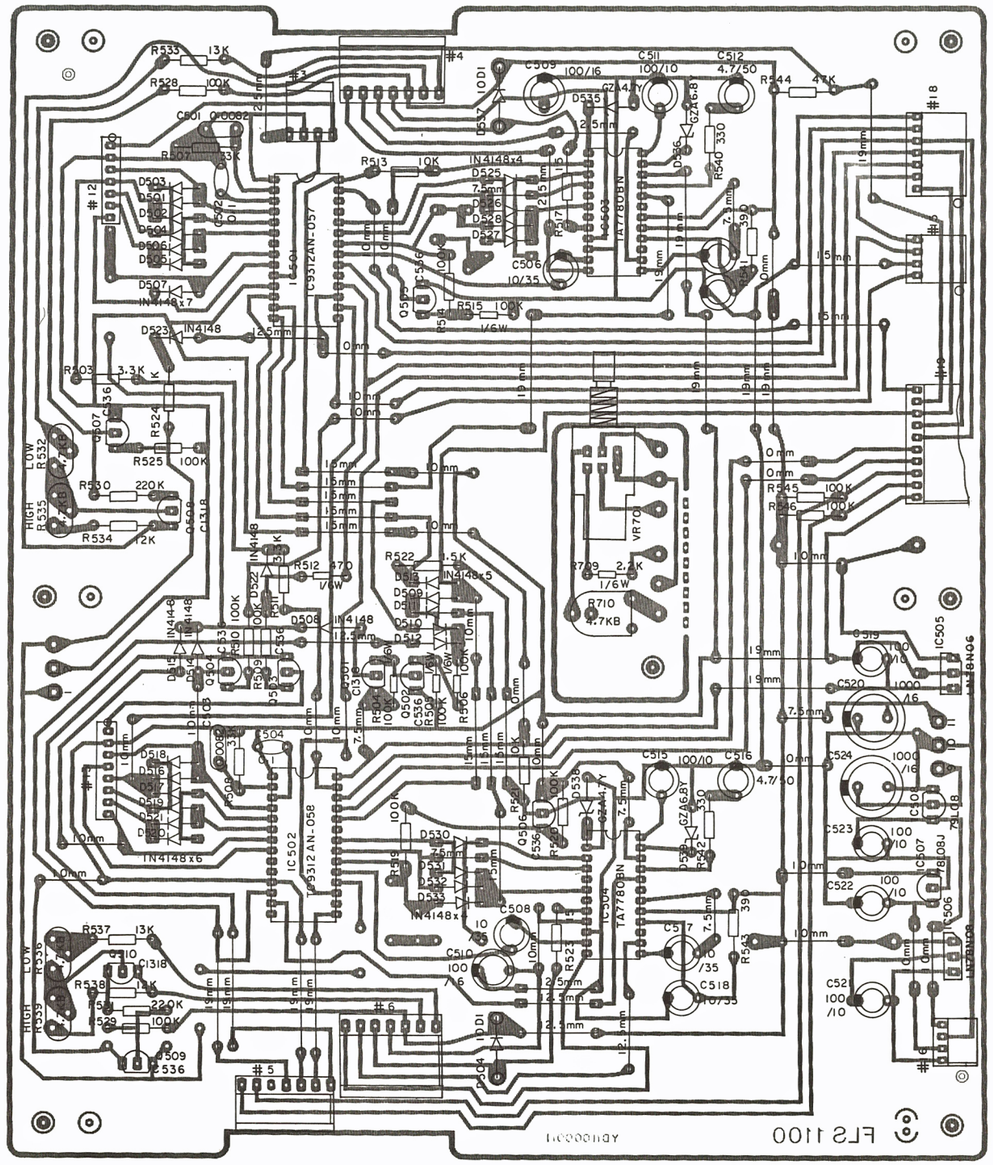
Schaltbild Laufwerksteuerung Cassette
Circuit diagram drive functions cassette



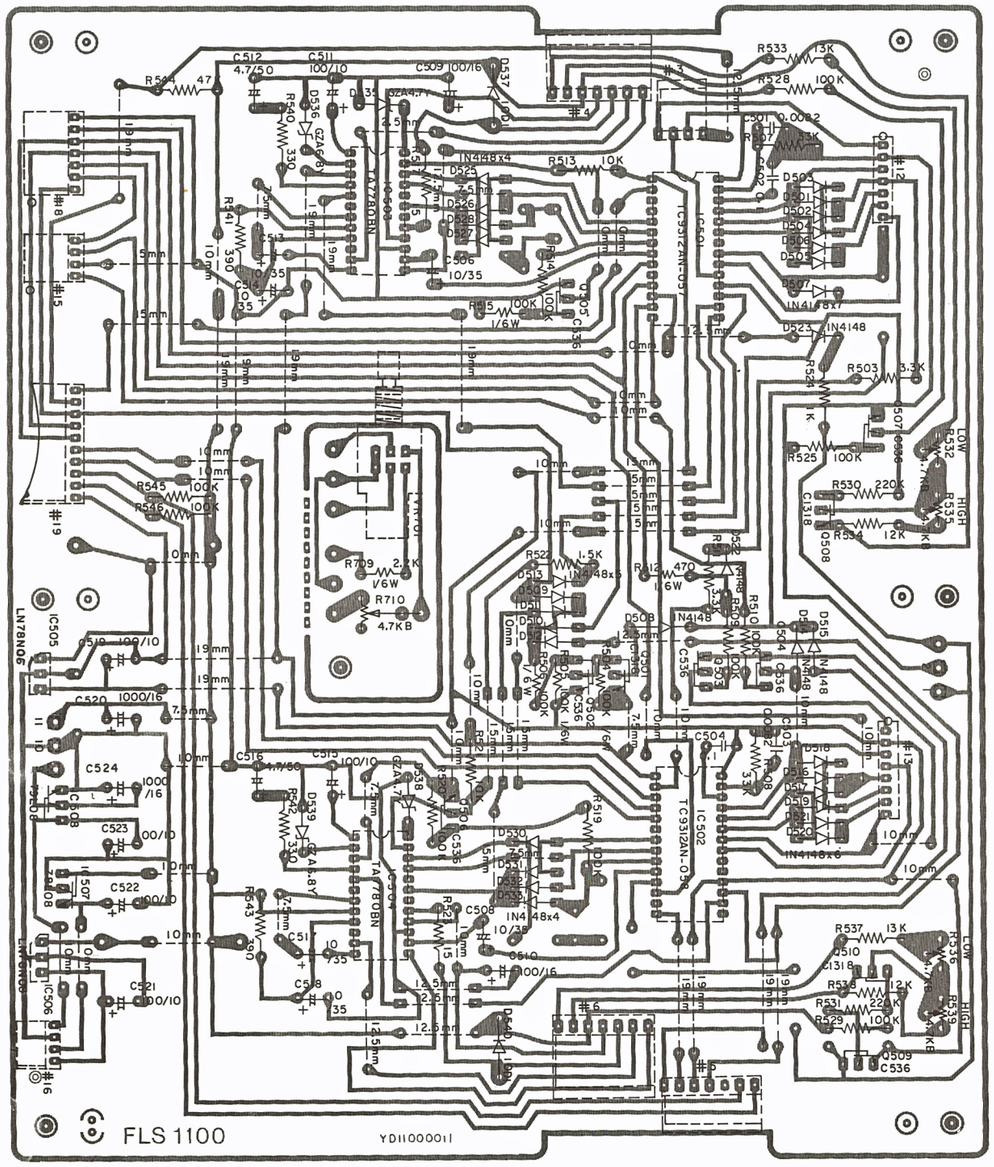
Platinendarstellung Laufwerksteuerung Cassette

P.C.B. diagram drive control cassette

Bestückungsseite/Top view

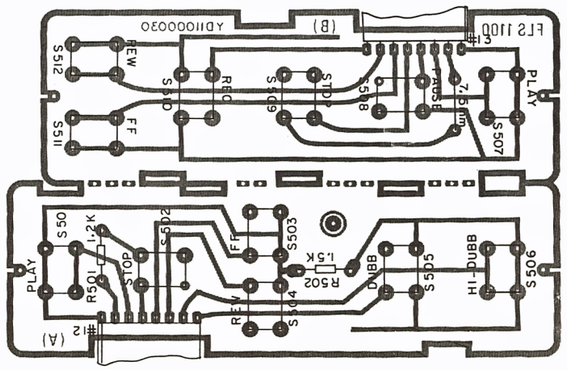


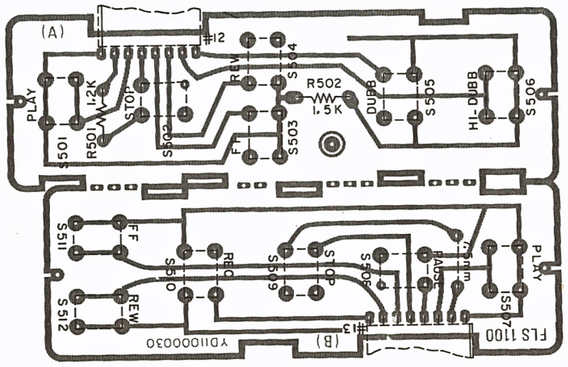
Leiterbahnseite/Bottom view



Bedienteilplatine Laufwerkfunktionen Tape A/B

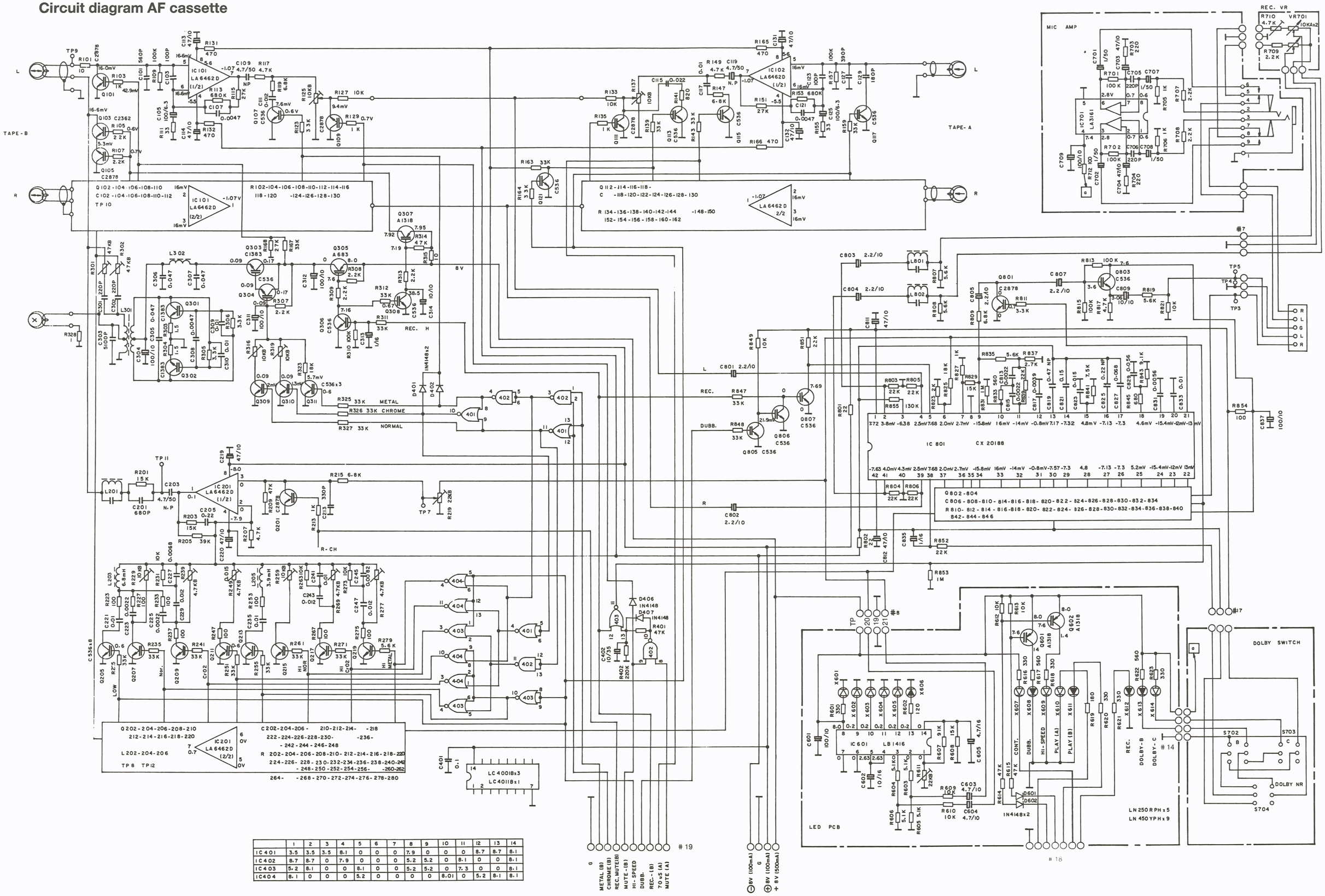
Control unit P.C.B. drive functions Tape A/B





Schaltbild NF-Cassette

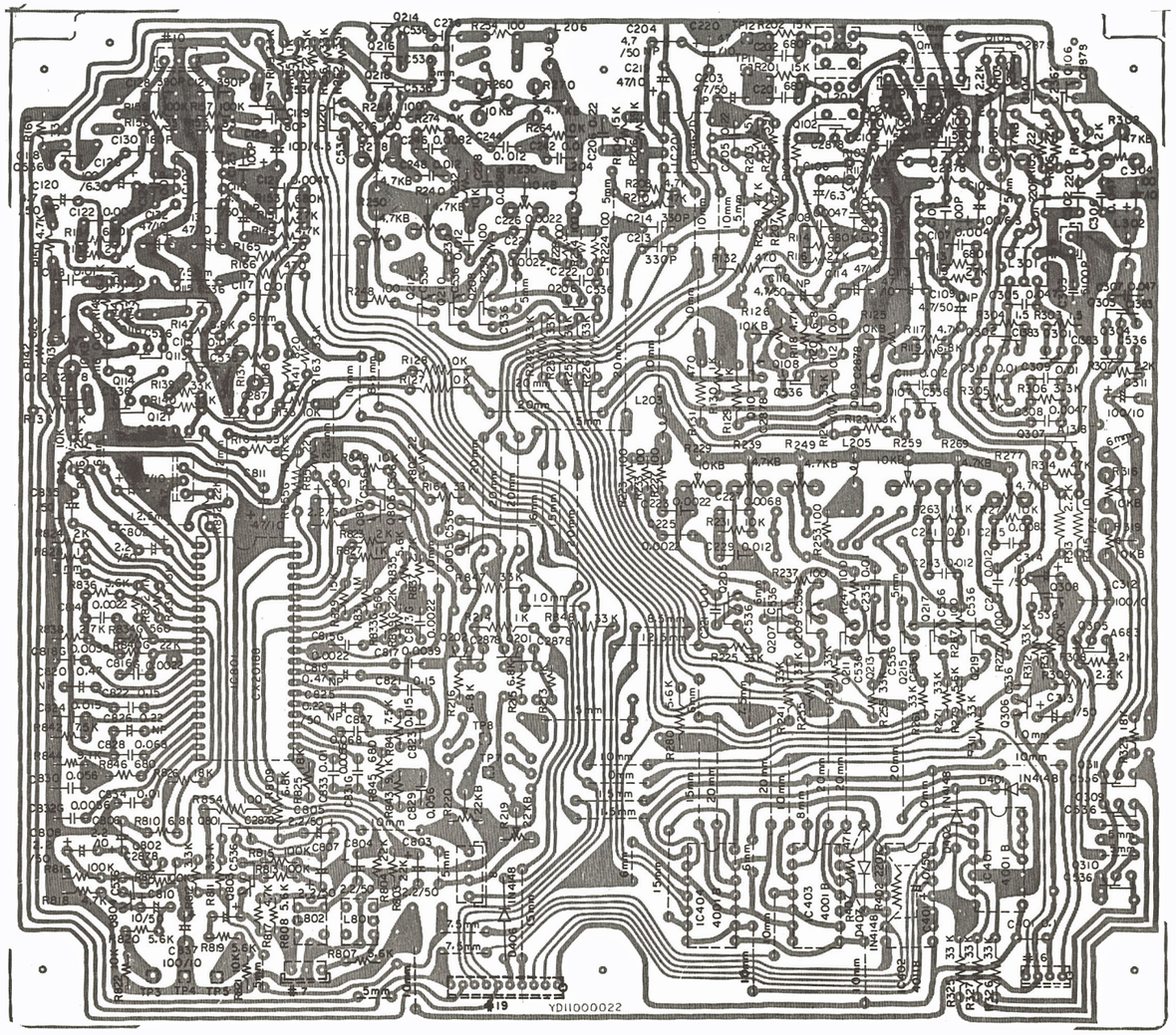
Circuit diagram AF cassette


TAPE-B
TAPE-A
MIC AMP
REC. VR
IC101 LA6462D (1/2)
IC102 LA6462D (1/2)
IC101 LA6462D (2/2)
IC201 LA6462D (1/2)
IC201 LA6462D (2/2)
IC701 LA3161
IC801 CX 20188
LC4001Bx3
LC4011Bx1
LB1416
METAL
CHROME
NORMAL
REC. H
R-CH
LED PCB
DOLBY SWITCH
DOLBY NR
TP5
TP4
TP3
TP7
TP8 TP12
TP11
#7
#8
#14
#16
#17
#18
#19
S702
S703
S704
R
L
G
L
R
8V (100mA)
G
8V (100mA)
+ 8V (500mA)
METAL (B)
CHROME (B)
REC. MUTE (B)
MUTE - (B)
HI - SPEED
DUBB.
REC. - (B)
7.0 vs (A)
MUTE (A)
DOLBY - B
DOLBY - C
REC.
CONT.
DUBB.
HI-SPEED
PLAY (A)
PLAY (B)
LN 250 RPH x 5
LN 450 YPH x 9
IN4148x2
IN4148x3
IN4148x4
Q101 C2878
Q103 C2362
Q105 C2878
Q107 C536
Q109
Q111 C2878
Q113 C536
Q115 C536
Q117 C536
Q121
Q201 C2878
Q205
Q207
Q209
Q211
Q213
Q215
Q217
Q219
Q301
Q302
Q303 C1383
Q304
Q305 A683
Q306 C536
Q307 A1318
Q308
Q309
Q310
Q311
Q801
Q802-804
Q805 C536
Q806 C536
Q807 C536
Q601 A1318
Q602 A1318
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
Q709
Q710
Q711
Q712
Q713
Q714
Q715
Q716
Q717
Q718
Q719
Q720
Q721
Q722
Q723
Q724
Q725
Q726
Q727
Q728
Q729
Q730
Q731
Q732
Q733
Q734
Q735
Q736
Q737
Q738
Q739
Q740

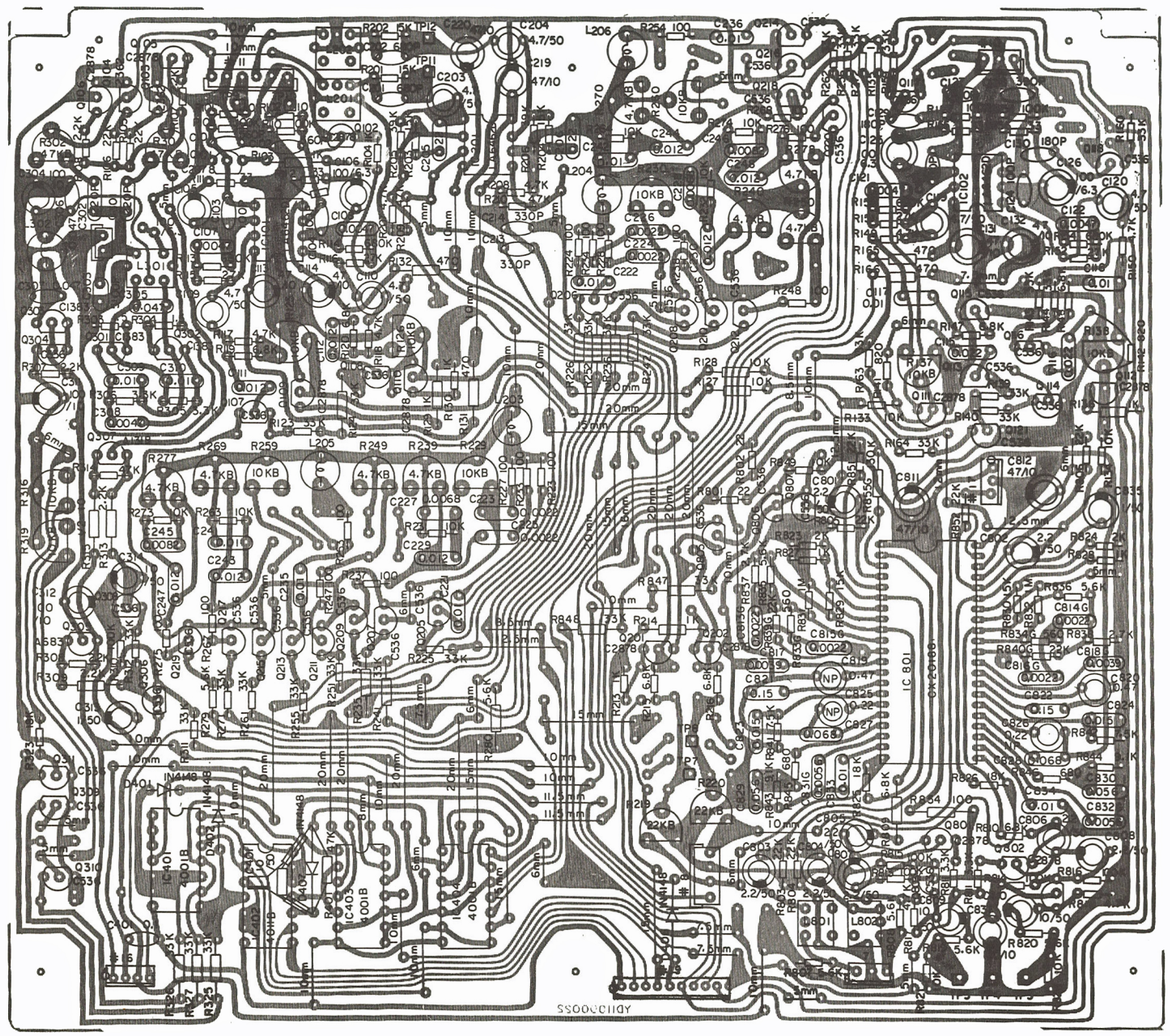
Platinendarstellung NF-Cassette

P.C.B. diagram AF cassette

Bestückungsseite/Top view

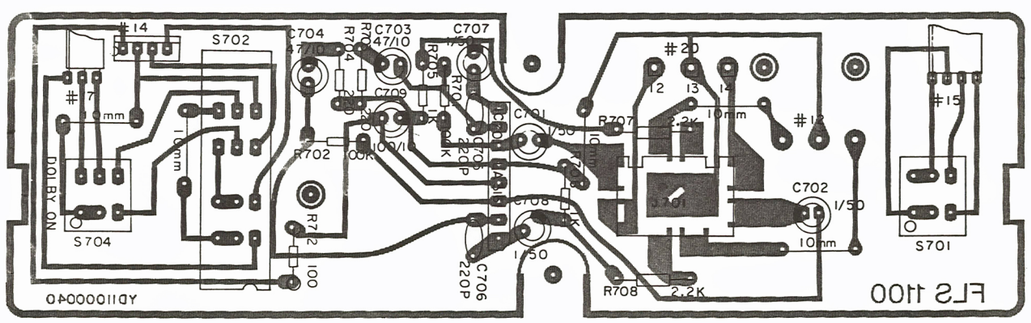


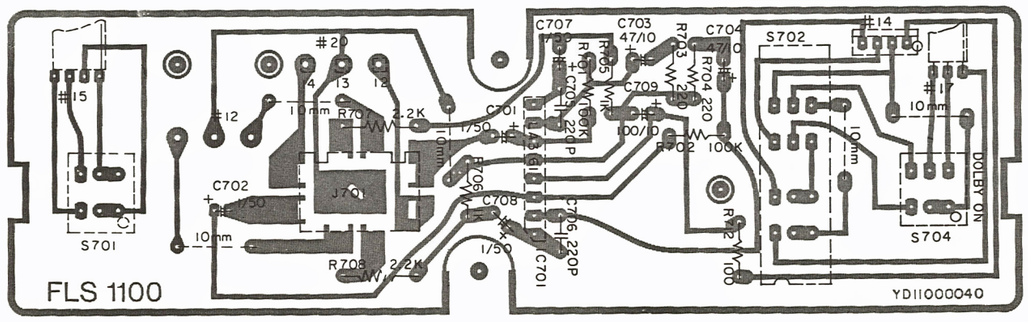
Leiterbahnseite/Bottom view



Bedienteilplatine Dolby, Continuous, Mikrofon

Control unit P.C.B. Dolby, continuous, microphone





Abgleichanweisung Cassette
Alignment procedure cassette

Tape position Recorderstellung	Input signal Eingangsspannung	Test tape Testcassette	Measuring instrument Meßgerät	Testpoint Meßpunkt	Adjustment location Abgleichpunkt	Measuring signal Meßsignal

1. Head azimuth/A/W-Kopf-Einstellung

PLAYBACK		MTT-114 N 10 kHz	V.T.V.M AC-Millivoltmeter	TP 3/TP 5	Azimuth screw	NF-max.

2. Tape speed/Geschwindigkeit

PLAYBACK LOW		MTT- 111 N 3000 Hz	FREQUENCY COUNTER Frequenz- zähler	TP 3/TP 5	TAPE A R 536 TAPE B R 532	3000– 3020 Hz
PLAYBACK HIGH		MTT-111 N 3000 Hz		TP 3/TP 5	TAPE A R 539 TAPE B R 535	6000– 6060 Hz

3. Dolby level/Dolby-Pegel

PLAYBACK		MTT-150 DOLBY TAPE 400 Hz	V. T. V. M AC-Millivoltmeter	TP 20/T 21	TAPE A R 125 R 126 TAPE B R 137 R 138	245 mV ≙ 0 dB

4. Dolby REC balance/Kanalsymmetrie

RECORD	1 kHz/125 mV	AC 712 IEC-IV	V. T. V. M AC Millivoltmeter	1. TP 21 (L) 2. TP 20 (R)	VR 701 R 710	245 mV L ≙ R

5. Level meter/Anzeige

RECORD	1 kHz/125 mV	AC 712 IEC-IV		VR 701 to 245 mV TP 20/TP 21 mit VR 701 an TP 20 o. TP 21 245 mV einstellen	R 611 5 YELLOW LED LIGHT R 611 so abgleichen, daß alle 5 gelben LED's brennen

6. OSC coil frequency/Oszillator-Frequenz

RECORD		AC 513 IEC-II	FREQUENCY COUNTER Frequenzzähler	ERASE HEAD Löschkopf	L 301	118– 125 kHz

7. Head bias level/Vormagnetisierung

RECORD		AC 712 IEC-IV	V. T. V. M AC Millivoltmeter	TP 9/TP 10	R 301/R 302	18–20 mV
		AC 513 IEC-II		TP 9/TP 10	R 319	13–14 mV
		AC 212 IEC-I		TP 9/TP 10	R 316	8–10 mV

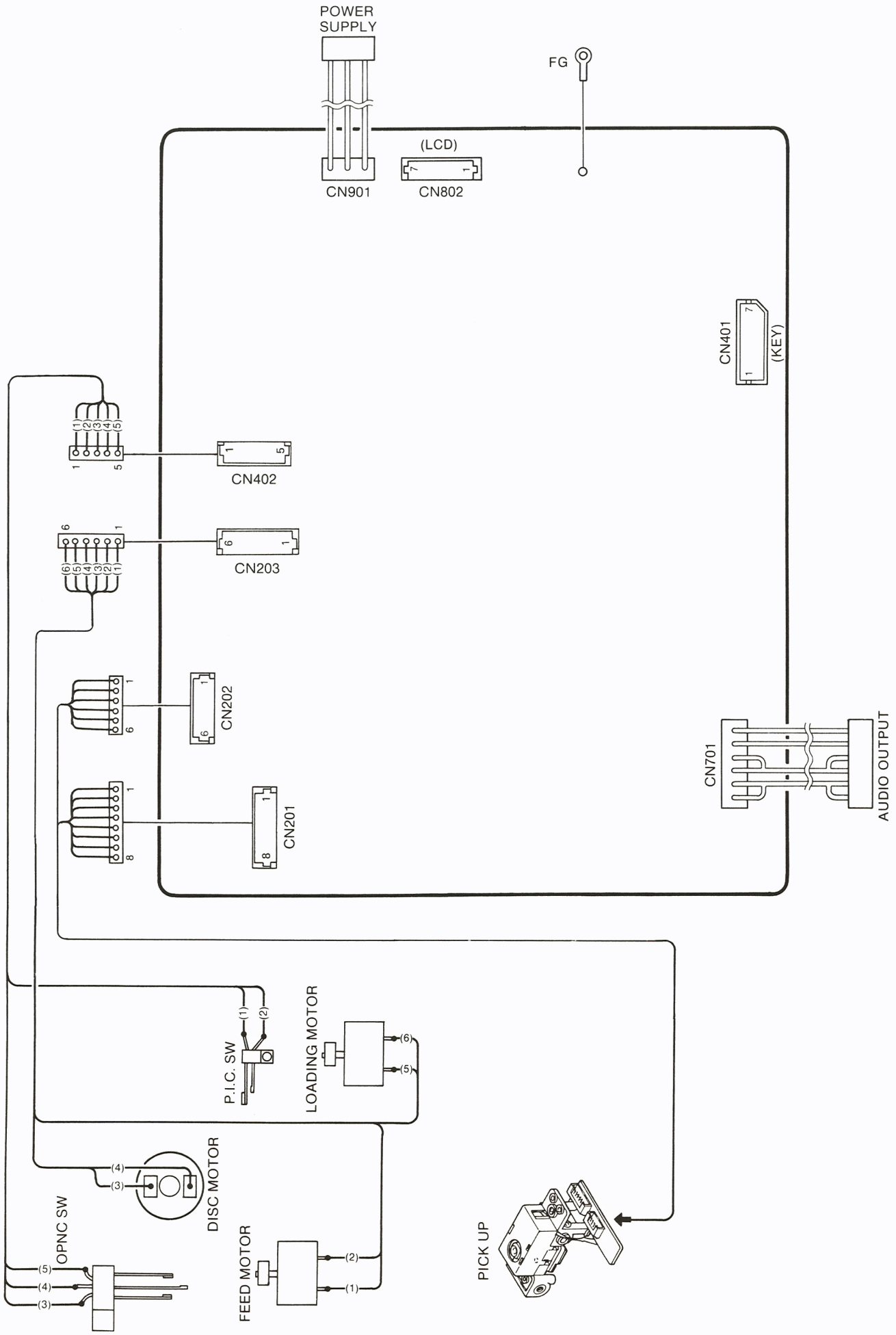
8. Record level/Aufnahmepegel

RECORD	1 kHz/125 mV	AC 712 IEC-IV	V. T. V. M AC-Millivoltmeter	TP 7/TP 8 VR 701 to max.	R 219/R 212	150 mV

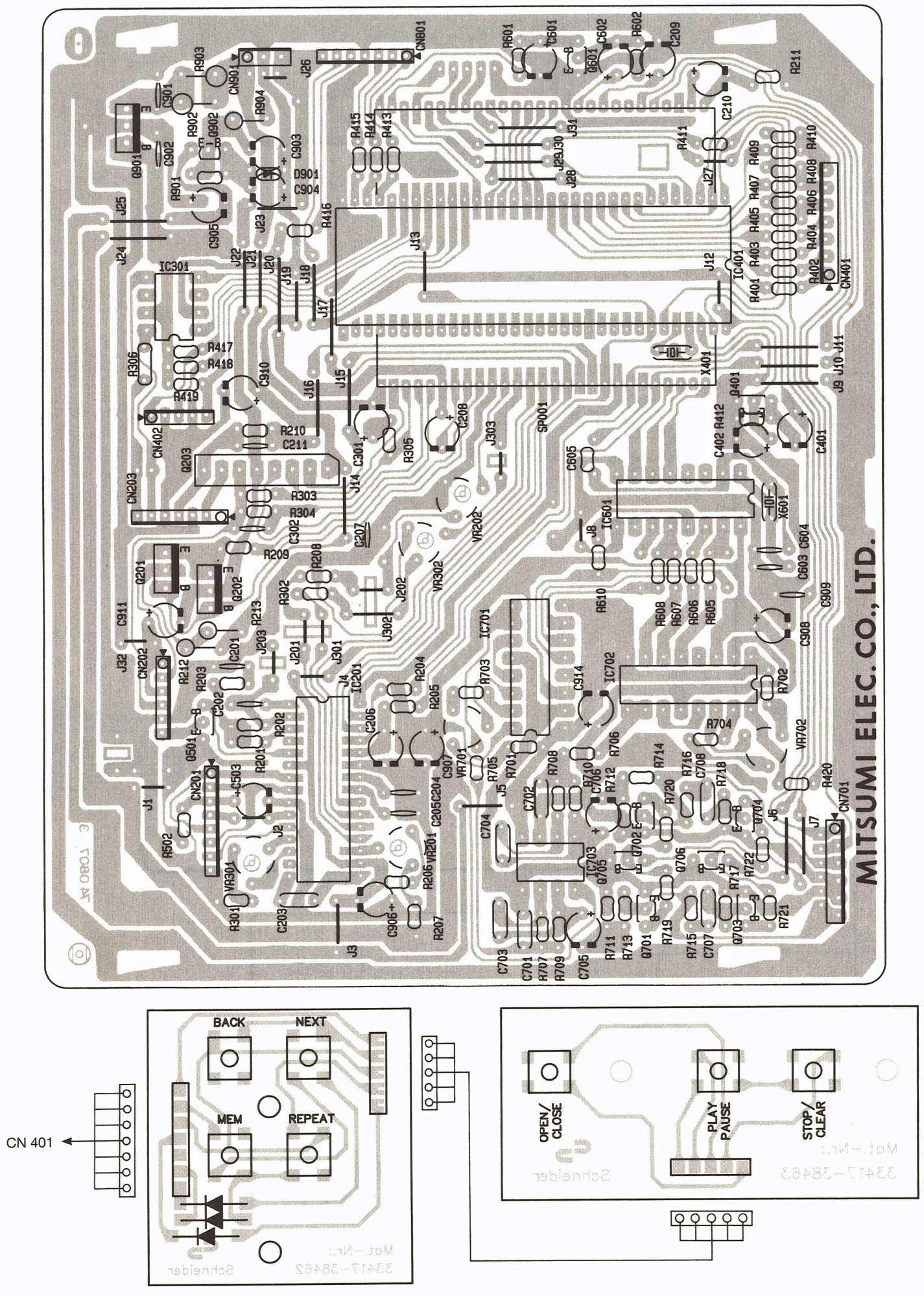
Ersatzteilliste Cassette/CD-Player
Spare parts list cassette/CD player

Best.-Nr. Part.-No.	Bezeichnung	Description	Position	Preisgruppe Price key
18 340 00	**Cassetten-Deck FLS 1100 kpl. mit Platinen**	**Cassette Deck FLS 1100 with P.C.B.'s assy.**	**B 15**	**G 7**
46 705 00	**Platine Laufwerksteuerung**	**Drive control P.C.B.**		**F 4**
46 706 00	**Grund-/NF-Platine**	**Main/AF P.C.B.**		**F 7**
46 707 00	**Bedienteil-Platine Laufw. Tape B**	**Control P.C.B. drive functions Tape B**		**B 4**
46 708 00	**Bedienteil-Platine Laufw. Tape A**	**Control P.C.B. drive functions Tape A**		**B 5**
46 709 00	**Bedienteil-Platine Dolby, Continuous, M/C**	**Control P.C.B. Dolby, Continuous, M/C**		**D 4**
46 710 00	**Anzeigeplatine**	**Indication P.C.B.**		**D 1**
46 711 00	**Platine Aufnahmeregler**	**Record VR P.C.B.**		**C 9**
13 558 00	IC LB 1416	IC LB 1416	IC 601	B 5
46 712 00	IC CX 20188	IC CX 20188	IC 801	D 3
32 997 00	IC LA 3161	IC LA 3161	IC 701	B 0
26 222 00	IC LC 4001 B	IC LC 4001 B	IC 401, 403, 404	B 5
26 221 00	IC LC 4011 B	IC LC 4011 B	IC 402	B 8
46 713 00	IC LA 6462 D	IC LA 6462 D	IC 101, 102, 201	A 8
46 714 00	IC TA 7780 BN	IC TA 7780 BN	IC 503, 504	C 5
45 472 00	IC UPC 78 L 08	IC UPC 78 L 08	IC 507	B 0
46 715 00	IC L 78 N 06	IC L 78 N 06	IC 505	B 0
46 716 00	IC L 78 N 08	IC L 78 N 08	IC 506	B 0
46 717 00	IC UPC 79L 08J	IC UPC 79L 08J	IC 508	B 0
46 718 00	IC TC 9312 AN-057	IC TC 9312 AN-057	IC 501	C 7
46 719 00	IC TC 9312 AN-058	IC TC 9312 AN-058	IC 502	C 7
01 241 00	Diode 1 N 4148	Diode 1 N 4148	D 401...	A 2
12 039 00	Diode 10 D 1 Sil.	Diode 10 D 1 Sil.	D 537, 540	A 4
22 956 00	Zenerdiode GZA 4,7 Y	Zenerdiode GZA 4.7 Y	D 535, 538	A 3
02 441 00	Zenerdiode ZPD 6,8	Zenerdiode ZPD 6.8	D 536, 539	A 5
44 081 00	Leuchtdiode LED LN 250 RPH	LED LN 250 RPH	D 606, 608, 611-613	A 3
44 082 00	Leuchtdiode LED LN 450 YPH	LED LN 450 YPH	D 601-606, 609, 610, 614	A 3
10 801 00	Transistor BC 327-16	Transistor BC 327-16	Q 305	A 6
40 663 00	Transistor 2 SA 1318	Transistor 2 SA 1318	Q 307...	A 2
13 545 00	Transistor 2 SC 536	Transistor 2 SC 536	Q 107...	A 3
03 713 00	Transistor 2 SC 1383 Q	Transistor 2 SC 1383 Q	Q 301-303	A 7
46 720 00	Transistor 2 SC 2362 G	Transistor 2 SC 2362 G	Q 103, 104	A 4
34 691 00	Transistor 2 SC 2878	Transistor 2 SC 2878	Q 101...	A 3
37 783 00	Spule 3,9 MH	Choke coil 3.9 MH	L 205/206	A 4
37 782 00	Spule 6,8 MH	Choke coil 6.8 MH	L 203/204	A 4
46 721 00	Spule 100 µH	Choke coil 100 µH	L 302	A 4
46 722 00	Spule Lösch-Oszillator	Bias oscillator coil	L 301	A 8
46 723 00	Filter Tiefpaß	Bias trap coil	L 201, 202, 801, 802	A 8
29 651 00	Tipptaste	Push switch	S 01-12	A 3
46 724 00	Tastenschalter 1fach Dolby, Continuous	Push switch 1-key Dolby, Continuous	S 701/704	B 1
46 725 00	Tastensatz 2fach Dolby B/C	Push switch 2-key Dolby B/C	S 702/703	B 6
38 269 00	Drehwiderstand Loudness	Rotary resistor Loudness	VR 701	B 6
37 441 00	Trimmpoti 4,7 kOhm	Variable resistor 4.7 kOhm	R 239...	A 3
37 443 00	Trimmpoti 10 kOhm	Variable resistor 10 kOhm	R 125...	A 3
32 587 00	Trimmpoti 22 kOhm	Variable resistor 22 kOhm	R 219-220	A 4
34 538 00	Trimmpoti 47 kOhm	Variable resistor 47 kOhm	R 301/302	A 2
12 520 00	Trimmpoti 5 kOhm	Variable resistor 5 kOhm		A 2
01 256 00	Trimmpoti 5 k/4,7 kOhm lieg.	Variable resistor 5 k/4.7 kOhm	R 710	A 4
01 691 00	Trimmpoti 25 k/22 kOhm lieg.	Variable resistor 25 k/22 kOhm	R 611	A 2
34 034 00	Mikrofonbuchse	Microphone jack	J 701	B 3
18 233 00	**CD-Player 1100 kpl. mit Platine**	**CD Player 1100 with P.C.B. assembly**	**B 16**	**G 2**
46 745 00	**Grundplatine CD 1100**	**Main P.C.B. CD 1100**		**F 9**
46 746 00	**IC-Zusatzplatine SP 001**	**Sub P.C.B. SP 001**		**E 5**
46 747 00	IC CXA 1081 S RF Amplifier	IC CXA 1081 S RF Amplifier	IC 201	B 4
46 748 00	IC LB 1630 Motor Driver	IC LB 1630 Motor driver	IC 301	B 3
46 749 00	IC CXP 5016H-509S Microcomputer	IC CXP 5016H-509S Microcomputer	IC 401	D 0
46 750 00	IC SM 5807 FP 16 Bit	IC SM 5807 FP 16 Bit	IC 601	C 4
40 763 00	IC PCM 56 P	IC PCM 56 P	IC 701/702	D 0
40 765 00	IC BA 4560 O. UPC 4560	IC BA 4560 O. UPC 4560	IC 703	A 6
40 767 00	Transistor 2 SD 1762 E	Transistor 2 SD 1762 E	Q 201	A 7
40 766 00	Transistor 2 SB 1185 E	Transistor 2 SB 1185 E	Q 202	A 8
40 768 00	Transistor STA 341 M	Transistor STA 341 M	Q 203	B 4
34 692 00	Transistor 2 SC 1740	Transistor 2 SC 1740	Q 401, 601, 701-704	A 2
12 959 00	Transistor 2 SA 1015 Y	Transistor 2 SA 1015 Y	Q 501	A 6
40 368 00	Transistor DTA 143 XS	Transistor DTA 143 XS	Q 705/706	A 2
46 751 00	Transistor HA 17805	Transistor HA 17805	Q 901	A 8
46 752 00	Transistor 2 SA 950 Y	Transistor 2 SA 950 Y	Q 902	A 5
26 146 00	Zenerdiode HZ. 6,1011	Zenerdiode HZ. 6.1011	D 901	A 2
29 622 00	Trimmpoti 20 kOhm	Variable resistor 20 kOhm	VR 201	A 3
29 624 00	Trimmpoti 100 kOhm	Variable resistor 100 kOhm	VR 701/702	A 3
46 753 00	Quarz CST 4,0 MGM	X-tal CST 4.0 MGM	X 401	A 9
40 769 00	Quarz XTP 16,9344 MHz	X-tal XTP 16.9344 MHz	X 601	B 2

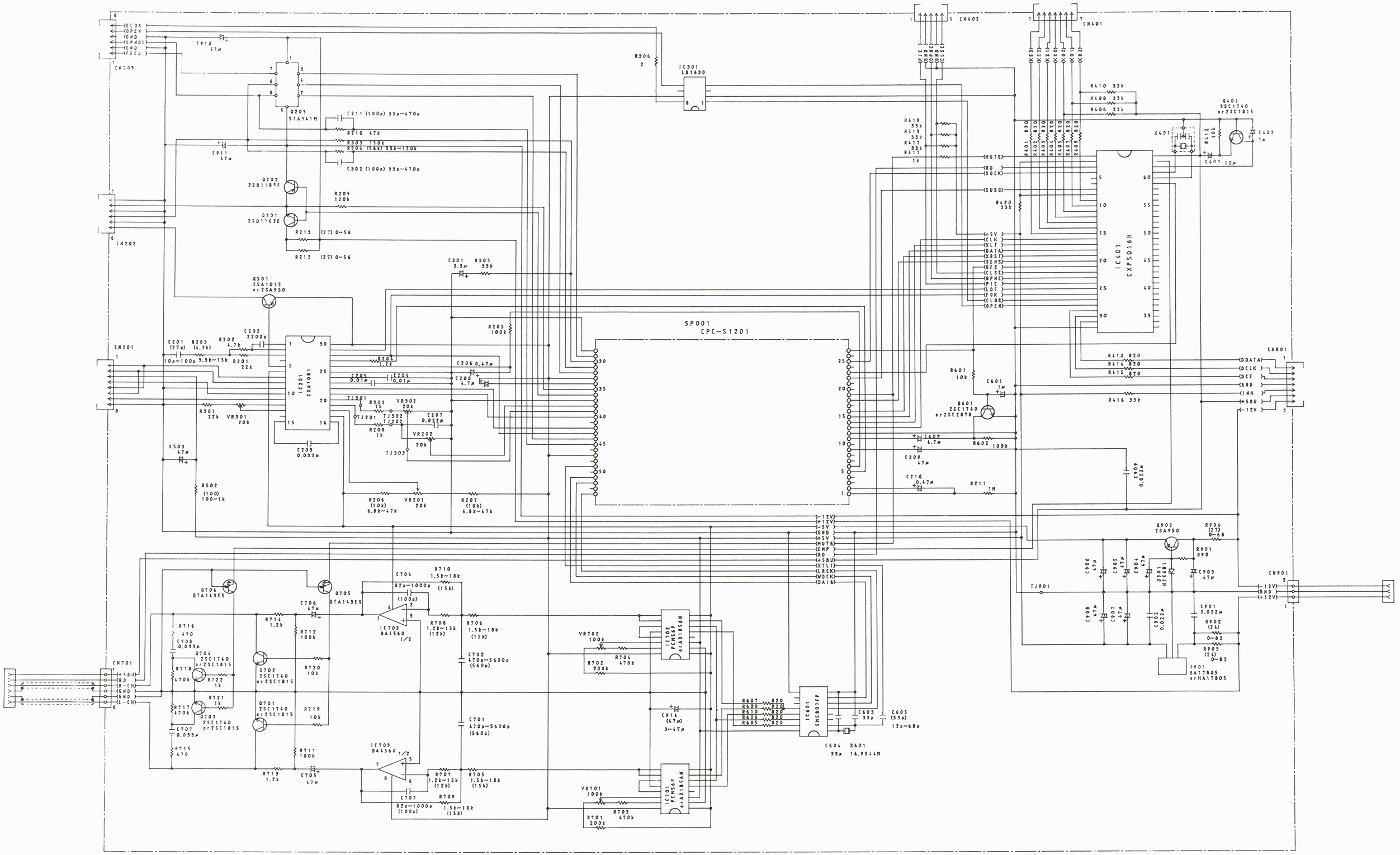
Verdrahtungsplan CD-Player
Wiring diagram CD player



Platinendarstellung CD-Player
P.C.B. diagram CD player



Schaltbild CD-Player
Circuit diagram CD player



IC-Transistor-Spannungstabellen und -Blockschaltbilder
IC transistor voltage chart and block diagrams

TR

Pin No. DC	E	C	B
Q201	0.0	12.0	-0.6
Q202	0.0	-12.0	-0.6
Q401	0.0	4.9	0.0
Q501	5.0	0.4	4.5
Q601	0.0	0.0	0.0
Q701	0.0	0.0	0.7
Q702	0.0	0.0	0.7
Q703	0.0	0.0	0.7
Q704	0.0	0.0	0.7
Q902	-5.1	9.7	-5.7

Pin No. DC	IN	GND	OUT
Q705	0.0	4.5	4.5
Q706	0.0	3.3	3.3
Q901	10.9	0.0	5.0

Q203

Pin No.	1	2	3	4	5	6	7	8
DC	12.0	-0.5	0.0	-0.5	-12.0	0.0	0.0	0.0

IC201

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DC	0.0	0.0	0.0	4.7	4.6	-5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.0
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DC	1.1	-5.1	-0.1	-0.1	0.0	-4.4	0.0	-3.5	0.0	0.0	2.5	2.4	0.1	4.9	4.9

IC301

Pin No.	1	2	3	4	5	6	7	8
DC	0.0	0.0	0.3	0.0	2.3	0.0	5.0	2.4

IC401

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DC	4.6	5.0	4.9	0.1	2.0	0.0	0.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DC	4.9	4.9	0.0	4.9	0.1	0.0	0.0	5.0	5.0	4.9	0.1	0.0	0.0	0.1	0.2
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
DC	2.9	0.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0
Pin No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
DC	0.0	0.0	0.0	0.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	0.0	2.3
Pin No.	61	62	63	64											
DC	2.2	4.9	3.4	4.9											

IC601

Pin No.	1	2	3	4	5	6	7	8
DC	2.4	2.6	4.8	2.1	2.5	0.0	2.3	0.0
Pin No.	9	10	11	12	13	14	15	16
DC	0.0	1.2	1.2	0.0	11.0	2.5	2.2	5.0

IC701

Pin No.	1	2	3	4	5	6	7	8
DC	-5.1	0.0	5.0	0.0	5.2	2.5	0.1	-5.1
Pin No.	9	10	11	12	13	14	15	16
DC	0.0	0.0	0.0	0.0	0.0	2.6	2.2	5.0

IC702

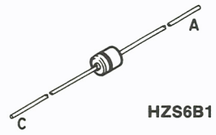
Pin No.	1	2	3	4	5	6	7	8
DC	-5.1	0.0	5.0	0.0	2.3	2.5	0.0	-5.1
Pin No.	9	10	11	12	13	14	15	16
DC	0.0	0.0	0.0	0.0	0.0	-2.6	2.2	5.0

IC703

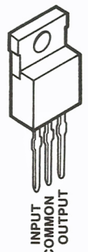
Pin No.	1	2	3	4	5	6	7	8
DC	0.0	0.0	0.0	-5.1	0.0	0.0	-3.0	5.0

SP001

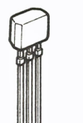
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DC	0.0	0.0	0.0	0.0	2.4	2.5	0.0	2.3	3.5	2.7	2.7	0.0	4.9	4.9	0.0
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DC	4.9	4.6	0.0	4.6	0.0	1.8	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
DC	0.0	-0.6	5.0	0.5	0.0	-0.6	0.0	0.0	0.0	-4.4	-5.1	0.0	0.1	-0.5	0.0
Pin No.	46	47	48	49	50	51	52	53	54						
DC	5.0	5.0	2.4	2.3	2.5	2.3	0.0	2.5	2.4						



HZS6B1 D901



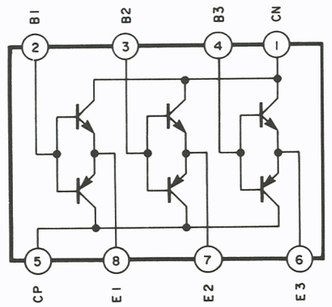
BA17805 Q901

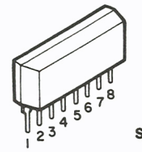


DTA143ES Q705, 706

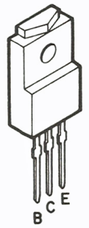
2SC1740 Q401, 601, 701
Q702, 703, 704

Q203 STA341M



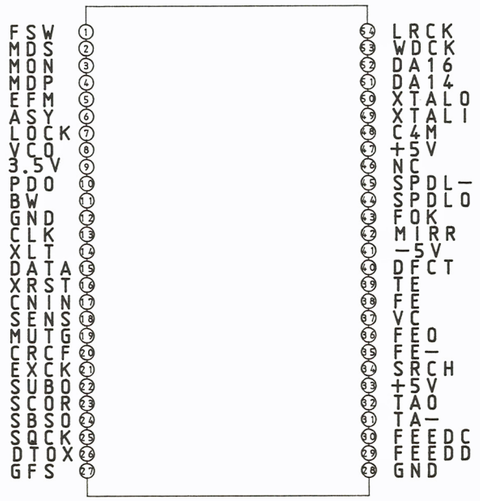


STA341M Q203

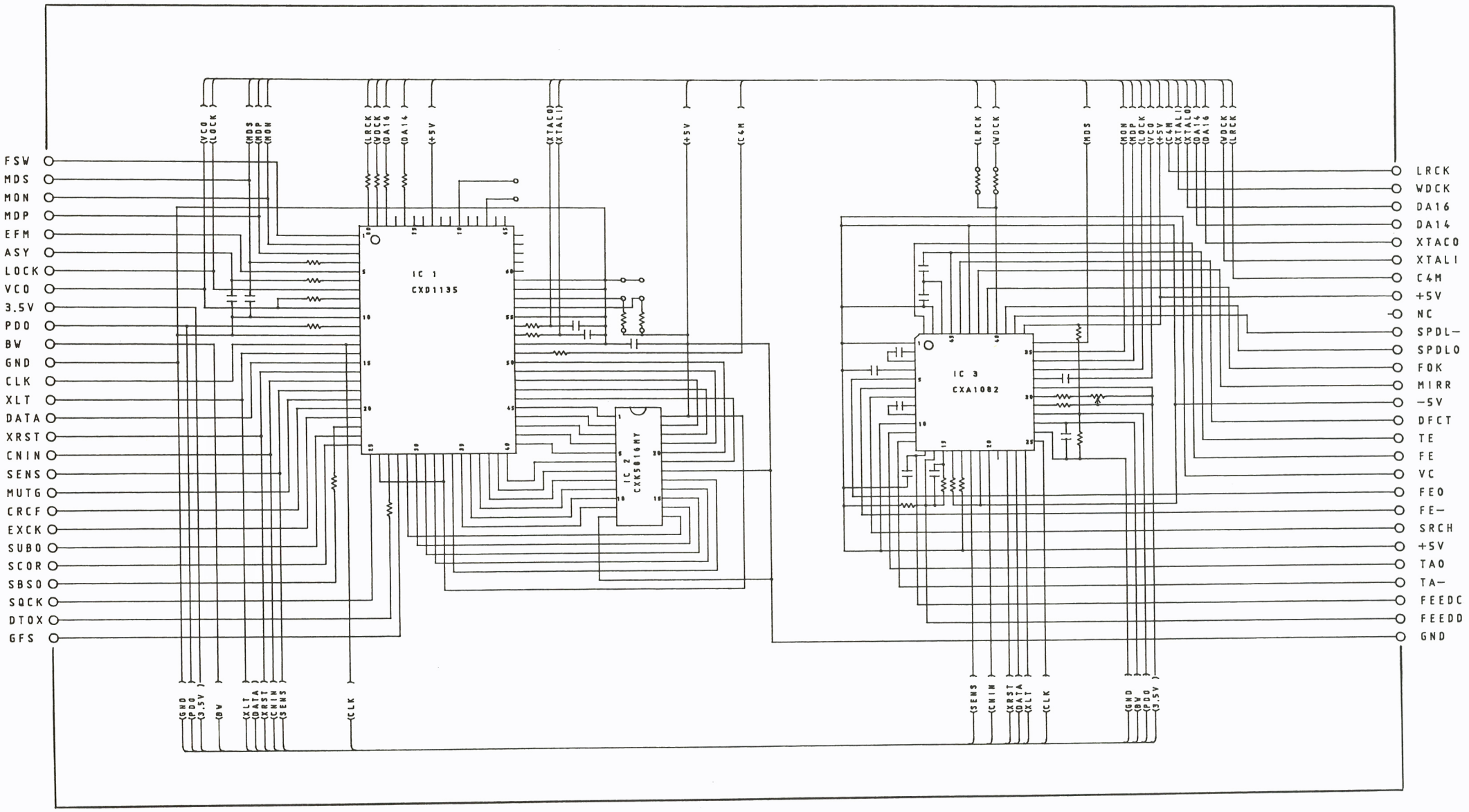


2SD1762 Q201
2SB1185 Q202

2SA1015 Q501
2SA950 Q902

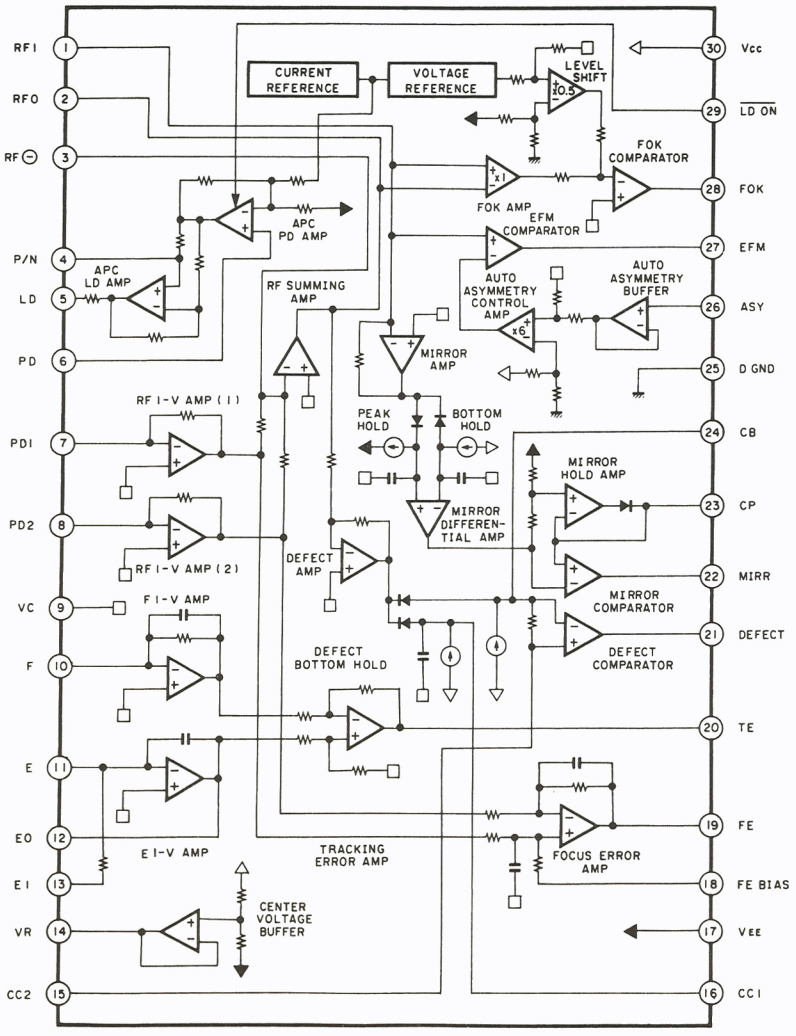


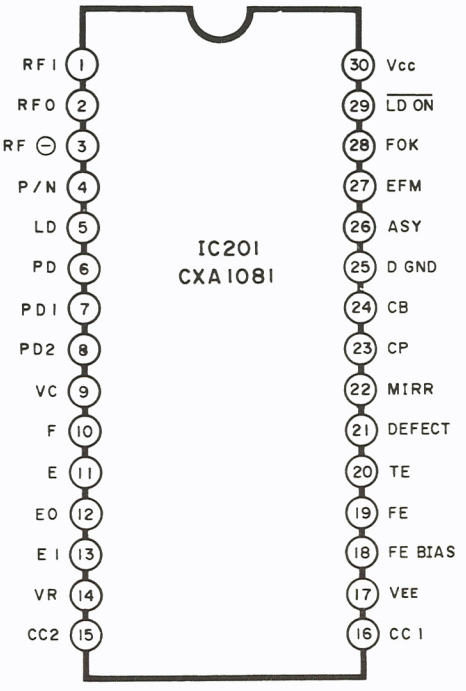
SP001
CPC−S1201



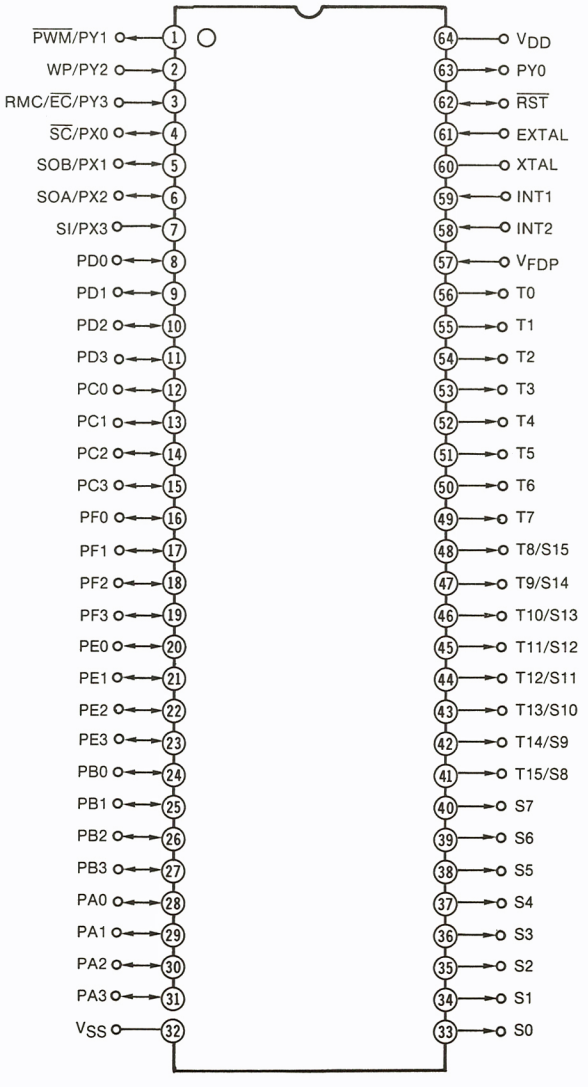
SP001 CPC-S1201

IC 201 CXA1081

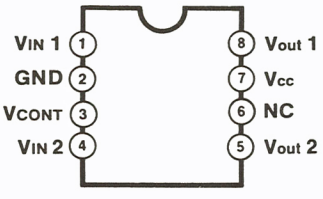


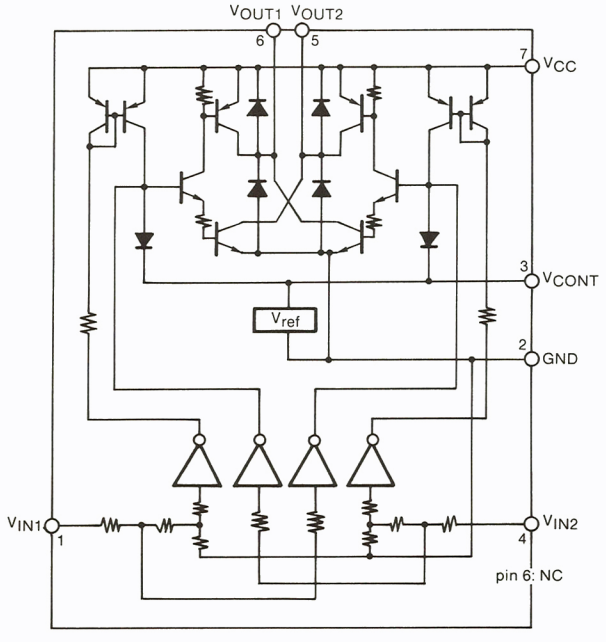


IC401 CXP5016H

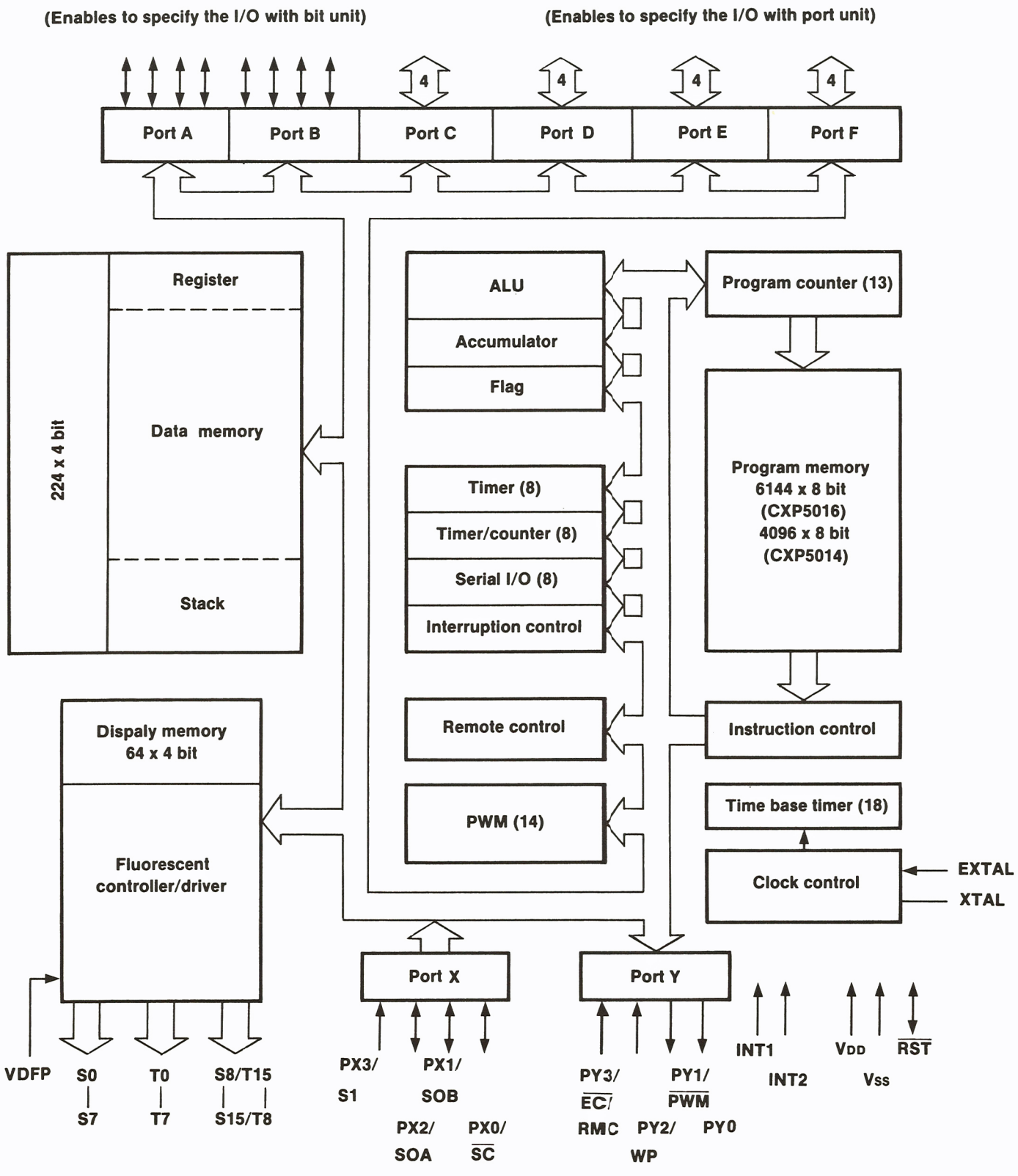


IC301 LB1630



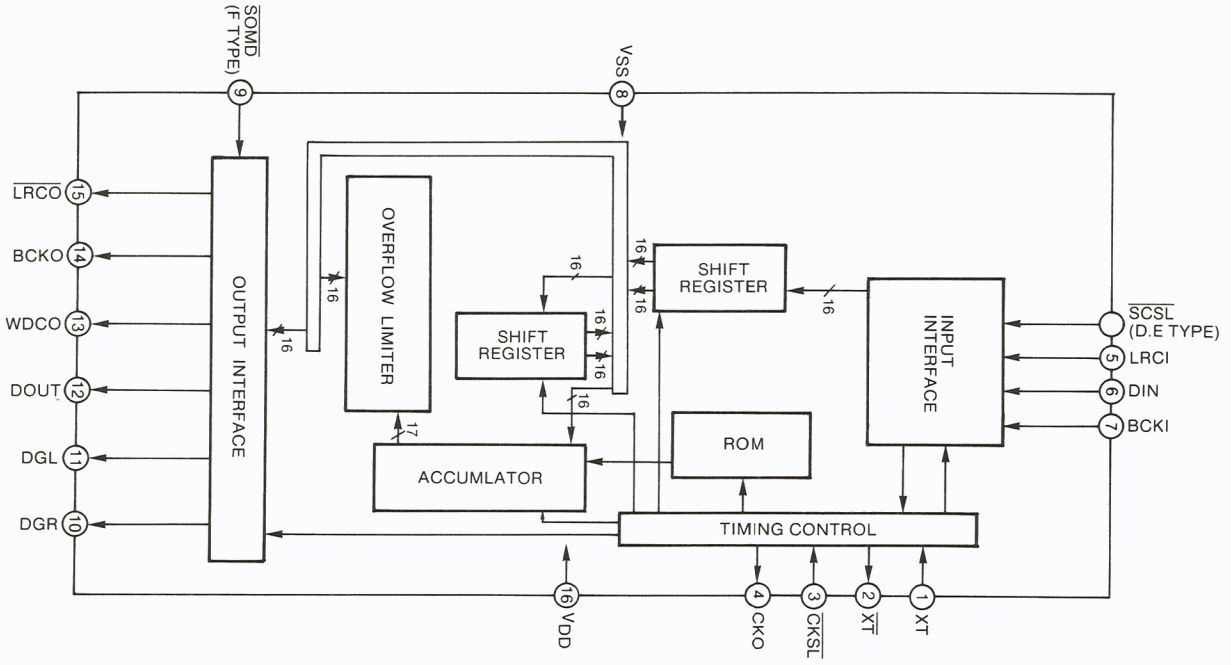


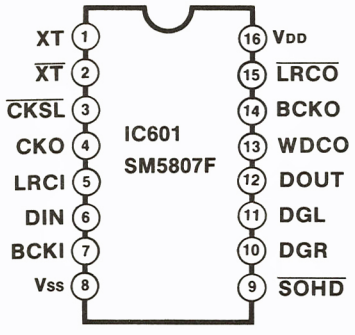
IC 401 CXP5016H



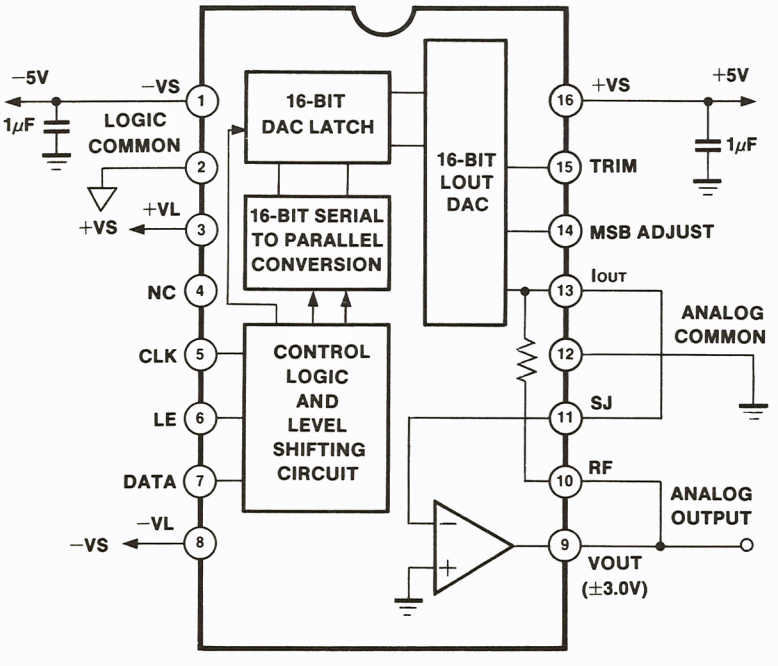
(Combined use to serial I/O)

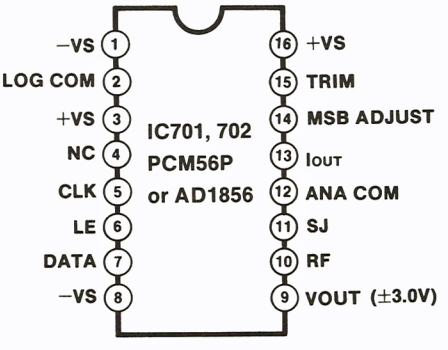
IC601 SM5807F



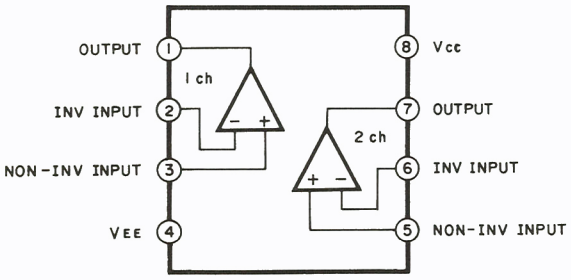


IC701, IC702 PCM56P

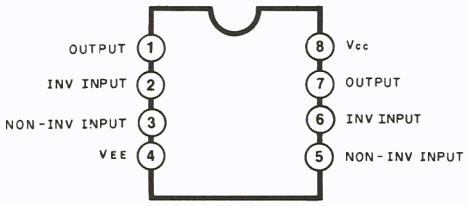




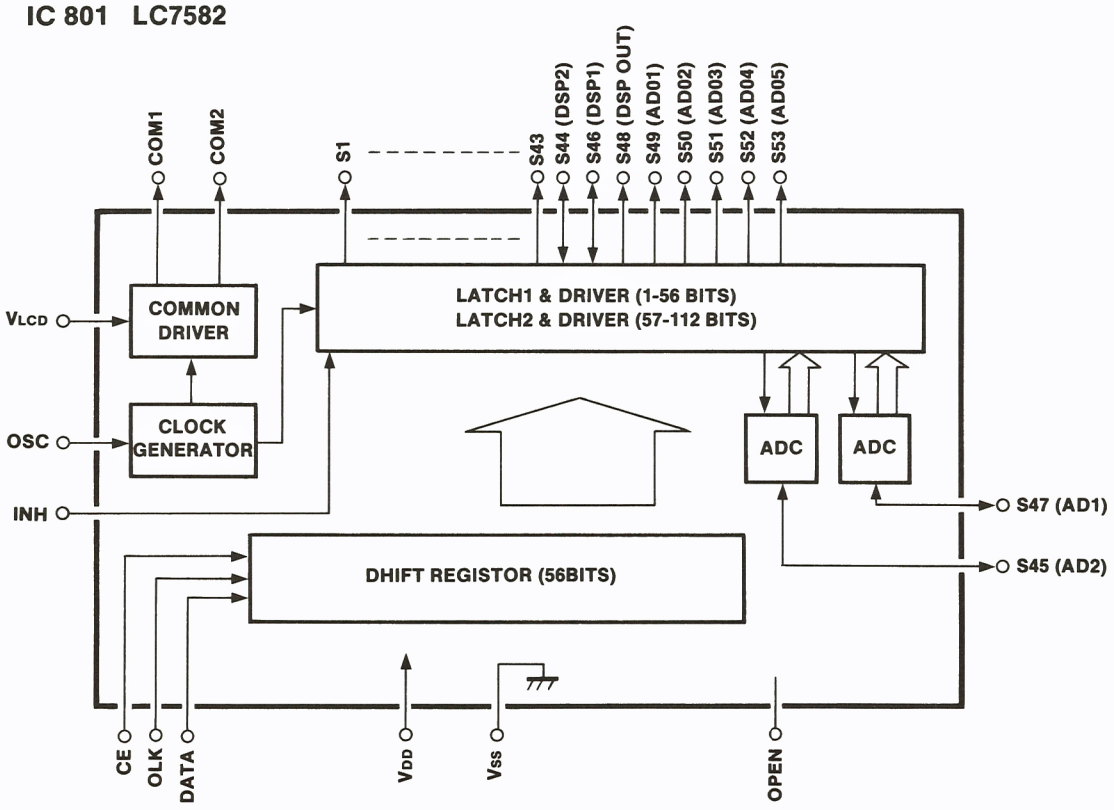
IC703 BA4560

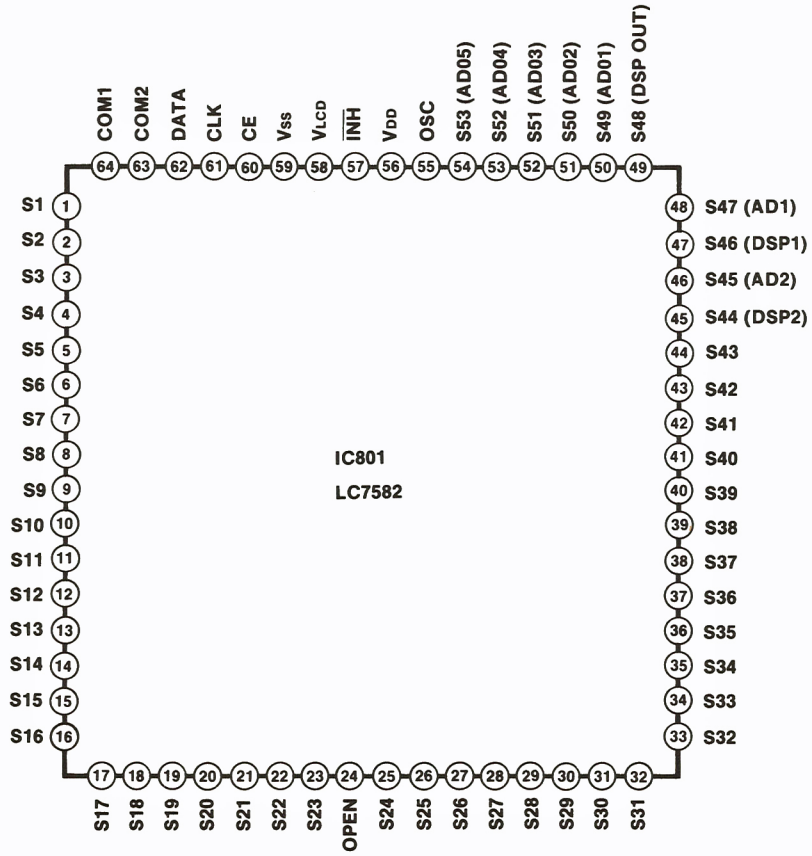


IC 703 BA4560

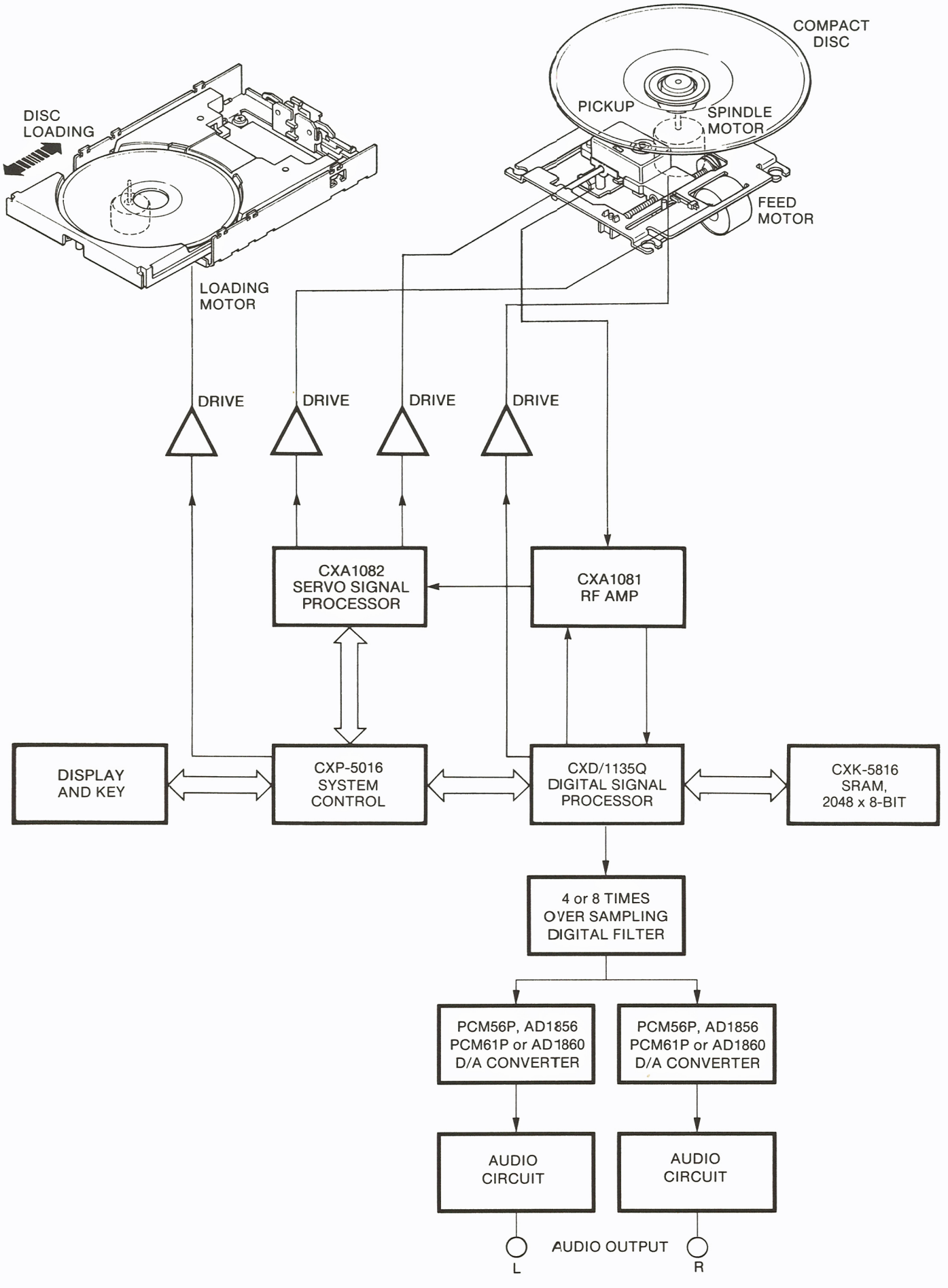


IC 801 LC7582





Blockschaltbild CD-Laufwerk
Block diagram CD mechanic



Abgleichanweisung CD-Spieler

Benötigte Meßgeräte: Frequenzzähler
Test-CD
Oszilloskop

VCO-Frequenzabgleich

Dieser Abgleich kann ohne CD-Platte durchgeführt werden.

1. Frequenzähler an Testpunkt VCO und Masse anschließen.
2. Pin 6 der IC-Zusatzplatine mit Masse TJ 901 verbinden.
3. Gerät einschalten.
4. Mit Poti VR auf der IC-Zusatzplatine Frequenz auf 4,3218 ±0,01 MHz abgleichen.
5. Kurzschlußbrücke an Pin 6 der IC-Zusatzplatine wieder entfernen.

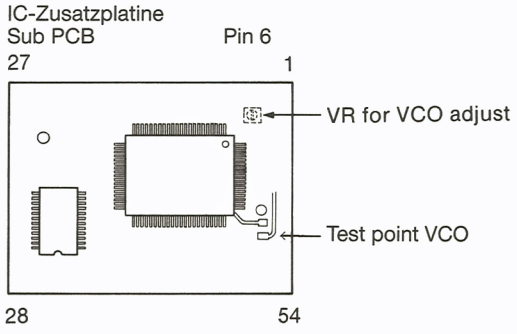
Alignment procedure CD player

Instruments required: Frequency counter
Test disc
Oscilloscope

VCO frequency adjustment

This VCO frequency adjustment does not need a CD disc.

1. Connect the frequency counter to test point (VCO) and to ground (TJ 901).
2. Connect the Sub P.C.B. 6th pin to GND wire.
3. Set the unit power on.
4. Adjust VR in Sub P.C.B. the frequency to 4.3218 ±0.01 MHz.
5. Resolder (Pin 6 in Sub P.C.B. and GND).

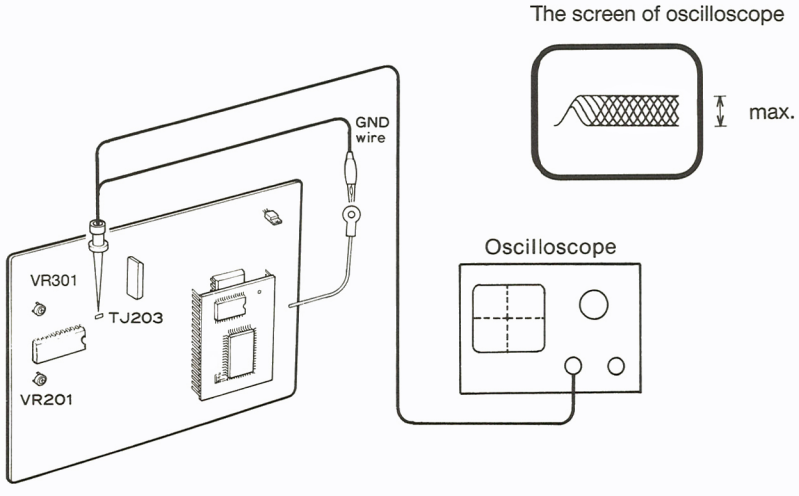


EF-Balance und Focus-Offset-Abgleich

1. CD-Platte einlegen und »PLAY«-Taste drücken.
2. Oszilloskop an Testpunkt TJ 203 und Masse TJ 901 anschließen.
3. HF-Signal mit VR 201 und VR 301 auf Maximum abgleichen.

EF-Balance and Focus-Offset adjustment

1. Load a disc and play back.
2. Connect an oscilloscope to the test points TJ 203 and ground (TJ 901).
3. Adjust VR 201 and VR 301 so that the HF-Signal becomes maximum.



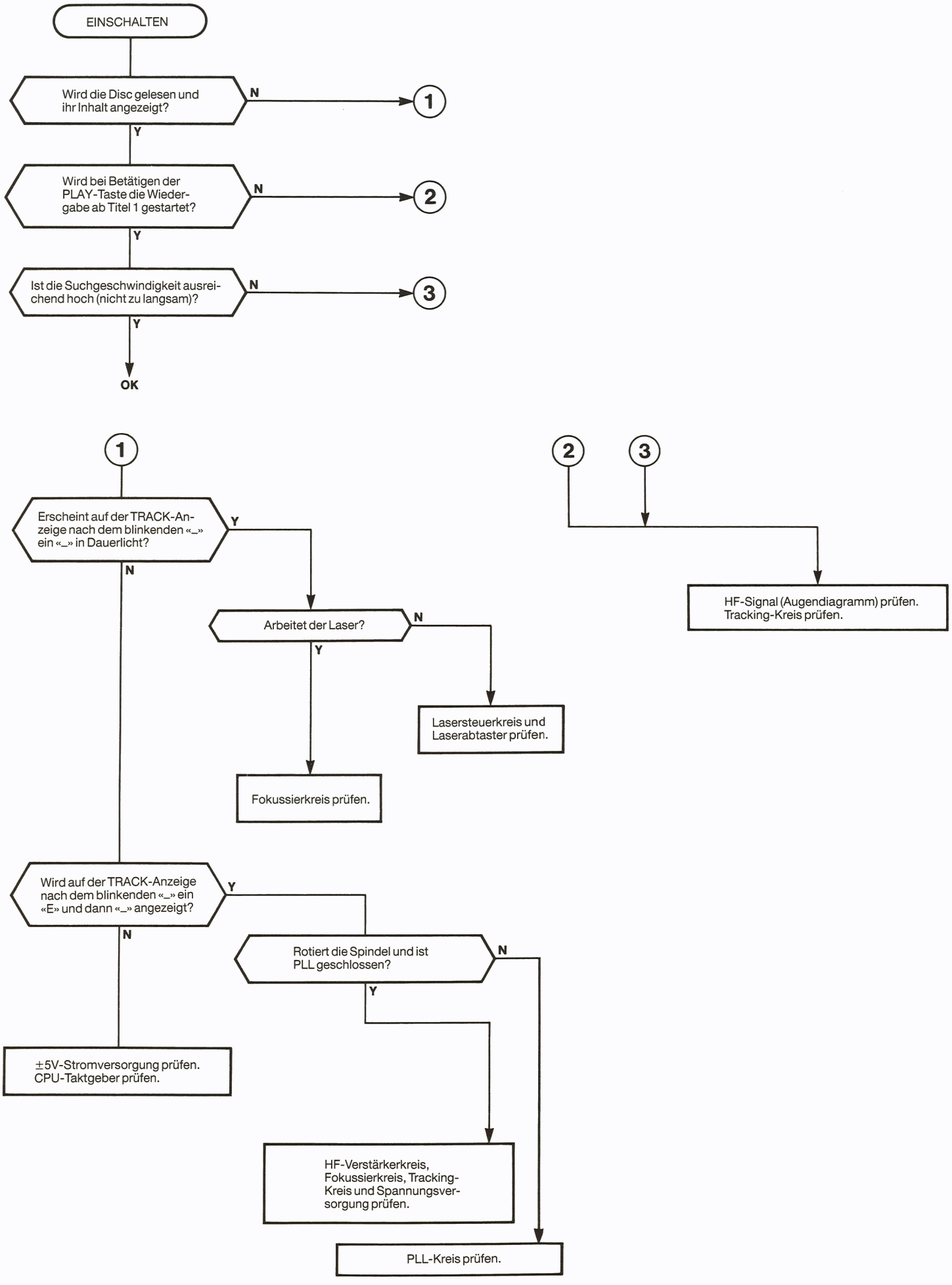
Fokus-Servo-Verstärkung

(Einstellung von Fokus- und Spurführungsverstärkung)
Für genauen Abgleich ist ein Servo-Analysator erforderlich. Jedoch besteht bei Normalbetrieb auch dann keine Schwierigkeit, wenn eine geringe Abweichung von den zulässigen Werten auftritt, da die Verstärkung in einem gewissen Bereich variieren kann. Deswegen sollte dieser Abgleich nicht ausgeführt werden. Mit der Fokus- und Spurführungsverstärkung werden Nachführeigenschaften des Abtasters bei mechanischen Erschütterungen und Stößen während des Betriebs beeinflußt.

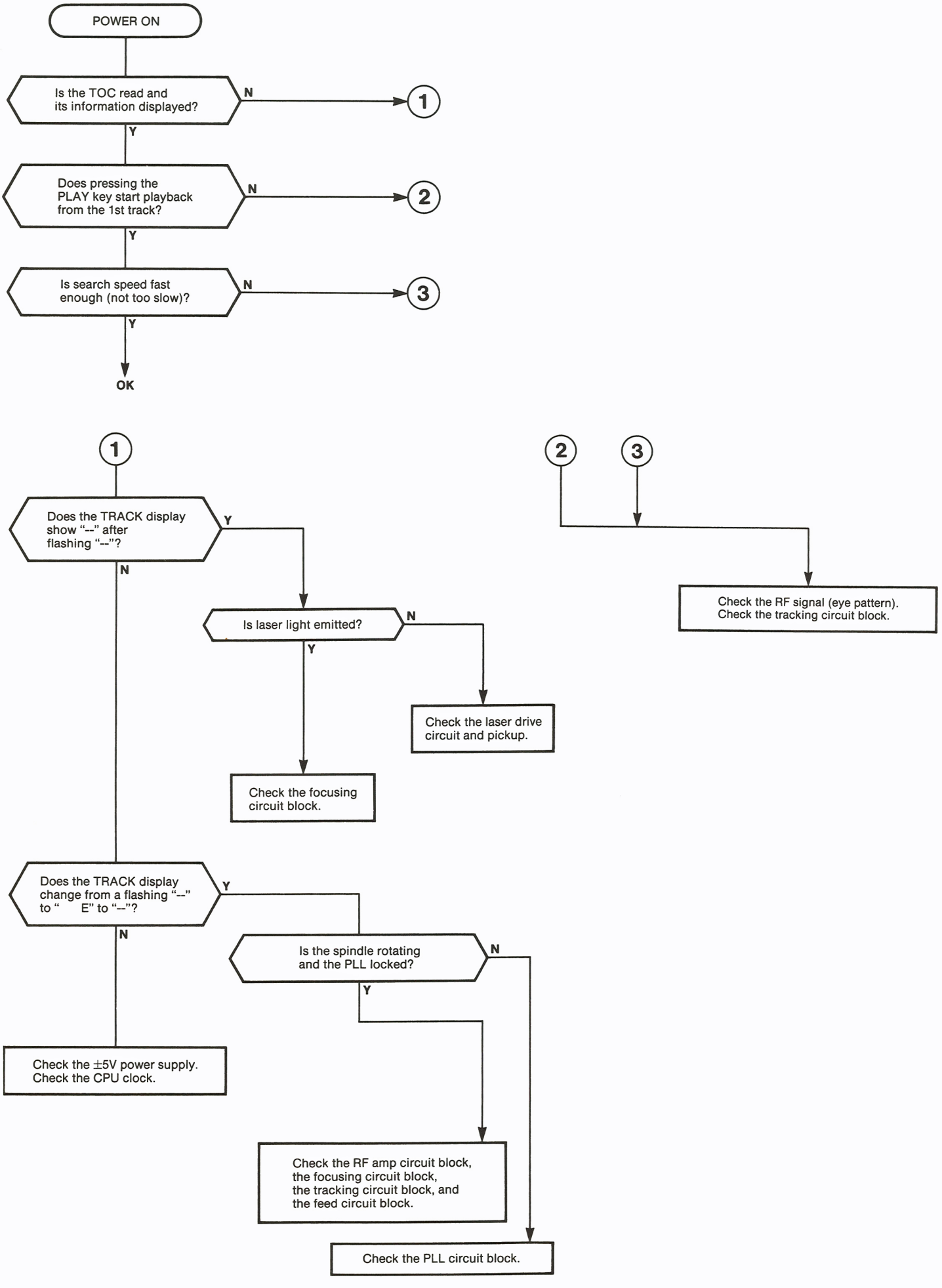
Focus servo gain adjustment

(Focus/Tracking-Gain adjustment)
A servo-analyzer is required for accurate adjustment.
However, there will be no problem in normal operation even in case of a minor drift from precise adjustment because the gain has an allowable margin.
Therefore, do not apply this adjustment.
The Focus/Tracking-gain determines the tracking property of the pickup against the mechanical noise and mechanical shock during the operation.

Fehlersuchdiagramm



Troubleshooting Flowchart



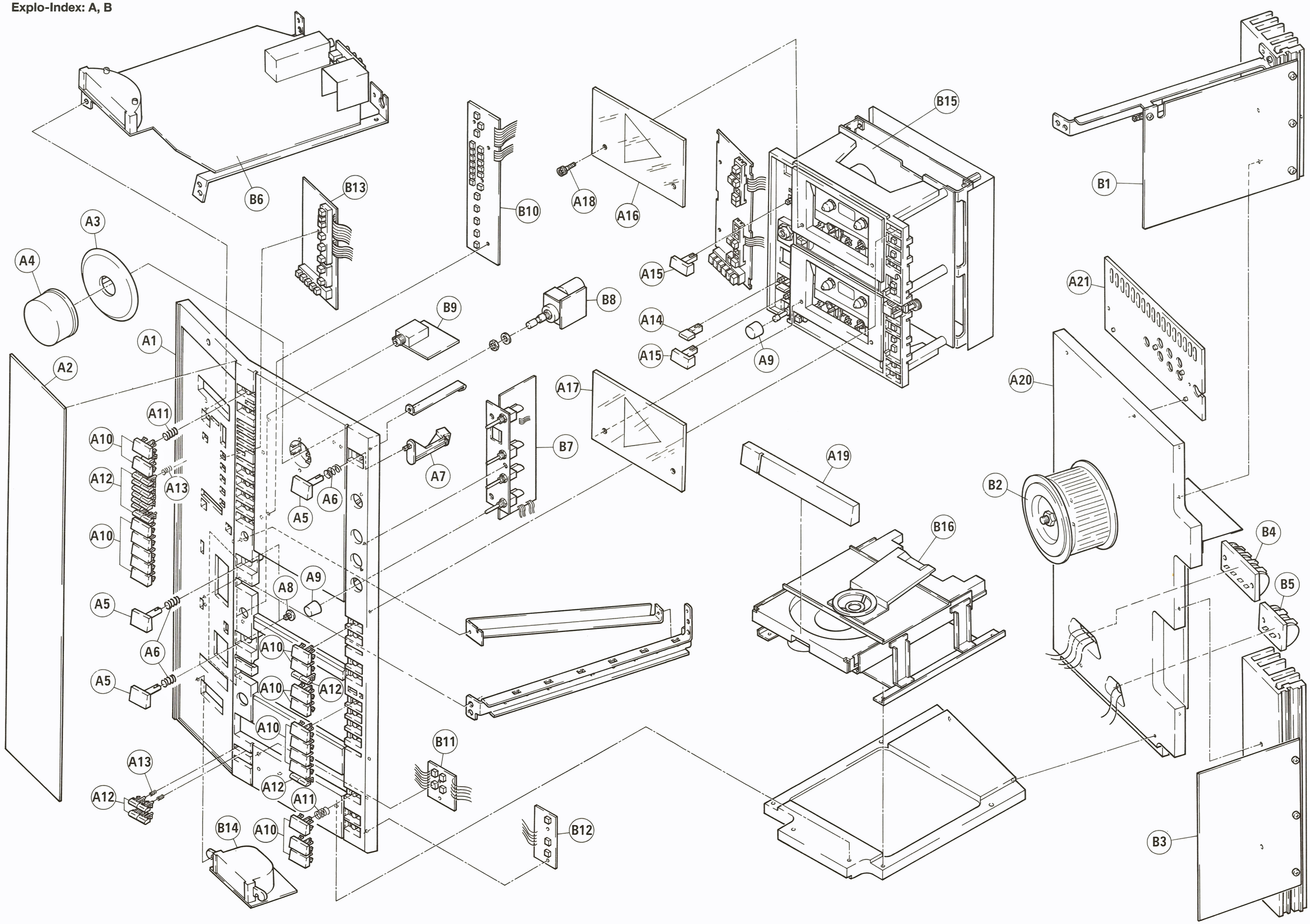
Ersatzteilliste Gehäuse/Lautsprecherbox/Chassis/CD-Mechanik
Spare parts list housing/speaker box/chassis/CD mechanism

Best.-Nr./Part.-No.	Bezeichnung	Description	Position	Preisgruppe/ Price key
41 951 00	Styropor-Verpackung Manhattan	Polyfoam packing Manhattan		D 0
41 945 00	Karton Manhattan	Carton packing Manhattan		C 6
18 325 00	Gehäuse mit Sockel schwarz	Housing with socle wood		F 7
41 955 00	Abstandshalter D=25 H=25	Distance bolt		A 7
41 858 00	Möbelgleiter D=18 × 5	Housing foot (wood socle)		A 2
47 034 00	Gehäuse ohne Sockel Vogelaugenahorn	Housing without socle Manhatten plus		G 9
41 958 00	Sockel Marmor	Socle marble		H 1
47 035 00	Gehäusefuß (Marmorsockel)	Housing foot (marble socle)		A 2
	Rückwandverschluß	Back door lock		
41 984 00	Frontteil unten	Front panel bottom		C 8
18 297 00	Frontglas grau	Front glass grey		D 6
47 055 00	Inbusschraube Frontscheibe	Screw front glass		A 2
18 349 00	Scheibe Gummi 5,3 × 9,5 × 1,0	Gum washer glass		A 0
27 638 00	Tieftöner 8 Ohm	Subwoofer 8 Ohm		D 2
41 965 00	Abdeckgitter Subwoofer	Cover subwoofer		C 0
	Fernbedienungs-Geber Manhattan	Remote control Manhattan		D 4
41 650 00	Micro-Batterie 1,5 V	Micro battery 1.5 V		A 6
47 036 00	**Lautsprecherbox Manhattan**	**Speaker box Manhattan**		**E 0**
41 895 00	Rückwand Lautsprecherbox	Back panel speaker box		B 9
27 714 00	Lautsprecher Mitteltöner	Speaker middle		C 4
27 490 00	Lautsprecher Hochtöner	Speaker tweeter		C 3
27 727 00	Frequenzweiche	Loudspeaker dividing network		C 2
18 363 00	Klemmanschlüsse 2fach	Push terminal double		A 7
41 986 00	Sockel LS Holz	Socle speaker box wood		C 8
41 980 00	Hülse H=35 mm, D=26/20,3 mm schwarz	Bush for socle	Sockel	A 2
41 956 00	Möbelgleiter D=30 × 5 mm schwarz	Housing foot (wood socle)	Sockel	A 3
47 032 00	Sockel LS (Marmor) 300 × 240 × 50	Socle speaker box marble		G 4
41 980 00	Hülse H=35 mm, D=26/20,3 mm schwarz	Bush for socle	Sockel	A 2
47 035 00	Gehäusefuß	Housing foot (marble socle)	Sockel	A 2
41 940 00	Rohrbügel kompl.	Stirrup conduit	Fuß	D 1
41 935 00	Abdeckkappe schwarz	Cover for screws	Beipack	A 2
27 455 00	Wollfilzzuschnitt	Felt	Beipack	A 1
41 939 00	Klemmhalterung	Dampholder	Beipack	A 8
41 943 00	Inbusschraube für Klemmhalterung	Socket head screw	Beipack	A 1
41 944 00	Inbus-Schlüssel	Key	Beipack	B 0
47 233 00	**Casseiver Manhattan 1100**	**Casseiver Manhattan 1100**		
41 983 00	Frontteil oben	Front Chassis	A 1	E 0
18 303 00	Anzeigeblende	Indication mask	A 2	C 5
18 468 00	Volumenanzeige	Volume indication	A 3	B 1
18 433 00	Alu-Drehknopf Volume	Rotary knob Volume	A 4	B 6
18 331 00	Tastenknopf 24 × 15,5 Power, Eject	Push button Power, Eject	A 5	A 3
38 100 00	Druckfeder D=8 L=14,7 (Power, Eject)	Pressure spring (Power, Eject)	A 6	A 0
18 328 00	Schalterstange Netzschalter	Switch rod Power switch	A 7	A 8
23 925 00	Stöpsel-Taste (Eject)	Plug push button (Eject)	A 8	A 1
18 336 00	Drehknopf 14,6 Klangregler Record Level	Rotary knob tone control Record Level	A 9	A 3
18 364 00	Tipp-Tastenknopf 24 × 10,5 × 14,1	Push button 24 × 10.5 × 14.1	A 10	A 3
31 641 00	Druckfeder	Pressure spring	A 11	A 0
18 333 00	Tastenknopf 12 × 3	Push button 12 × 3	A 12	A 2
31 864 00	Druckfeder	Pressure spring	A 13	A 0
18 343 00	Tastenknopf 12 × 3 Dolby B/C	Push button Dolby B/C	A 14	A 7
18 344 00	Tastenknopf Continuous/Dolby	Push button Continuous/Dolby	A 15	A 5
27 755 00	Cassettenfachdeckel Tape A	Cassette case window Tape A	A 16	B 4
47 175 00	Cassettenfachdeckel Tape B	Cassette case window Tape B	A 17	B 4
47 231 00	Inbusschraube Cassettenfachdeckel	Screw cassette case window	A 18	A 5
47 080 00	Schlittenblende CD	Lid plate	A 19	B 3
18 323 00	Chassis-Rückwand	Chassis back panel	A 20	C 7
18 302 00	Buchsenblende	Jack panel	A 21	B 5
39 203 00	Netzteil-Platine	Power supply P.C.B.	B 1	F 1
18 345 00	Ringkerntrafo	Power transformer	B 2	F 2
39 177 00	Endstufen-Platine	Output amplifier P.C.B.	B 3	F 5
39 226 00	LS-Buchsen 4fach	LS jack 4-set	B 4	B 6
39 269 00	LS-Buchsen 2fach	LS jack 2-set	B 5	B 3
39 173 00	HF-Platine	RF P.C.B.	B 6	G 1
39 166 00	Klangregler-Platine	Tone control P.C.B.	B 7	E 0
39 159 00	Lautstärkepoti kpl. mit Platine	Volume poti with P.C.B.	B 8	C 9
39 160 00	Kopfhörerverstärker-Platine	Headphone amplifier P.C.B.	B 9	C 3
39 158 00	Bedienteil-Platine Tuner	Control P.C.B. tuner	B 10	C 6
38 462 00	CD-Bedienteil-Platine 1	Repeat/Memory	B 11	B 4
38 463 00	CD-Bedienteil-Platine 2	Play/Pause	B 12	B 4
39 157 00	Anzeige-Platine	Indication P.C.B.	B 13	D 4
27 721 00	Display CDP 1100	Display CDP 1100	B 14	D 9
18 340 00	Cassettendeck FLS 1100 kpl. mit Platinen	Cassette deck FLS 1100 with P.C.B. assembly	B 15	G 7
18 233 00	CD-Player 1100 kpl. mit Platine	CD player 1100 with P.C.B. assembly	B 16	G 2
46 754 00	**CD-Mechanik kpl. CDP 1100**	**Mechanism assembly**		
46 755 00	Schlitten CD-Platte	Tray	DM 1	B 4
46 756 00	Auflagebügel CD-Platte	Lifter	DM 2	B 0
46 757 00	Zentrierscheibe oben	Disc cramper	DM 8	A 3
46 758 00	Kurvenzahnrad Lademechanik	Drive gear	DM 11	A 9
46 759 00	Schaltkontakt	LSC-1223-31 Leaf SW	DM 17	A 9
44 132 00	Mikroschalter MSW L 541 ST	Leaf switch MSW L 541 T	DM 18	A 4
44 121 00	Pulley Gewindestange	Pulley feed	DM 23	A 2
46 760 00	Laserabtaster kpl.	Laser pickup	DM 26	F 1
44 116 00	Riemen Lasermotor	Belt laser motor	DM 29	A 3
44 124 00	Gleitstange	Guide shaft	DM 30	A 4
46 761 00	Motor Antrieb CD-Platte	Disc motor	DM 34	C 0
46 762 00	Antriebsteller	Disc table	DM 37	B 0
46 763 00	Zentrierscheibe unten	Locater	DM 39	A 3
44 115 00	Motorpulley Laser	Motorpulley laser	DM 41	A 1
44 117 00	Motor Laser	Motor laser	DM 42	B 6
46 764 00	Zwischenrad/Lademechanik	Idle gear C	DM 52	A 3
46 765 00	Riemen Lademotor	Belt	DM 53	A 4
40 752 00	Motor Schlitten	Motor tray	DM 54	B 9
46 766 00	Pully Lademotor	Motor pulley	DM 55	A 2

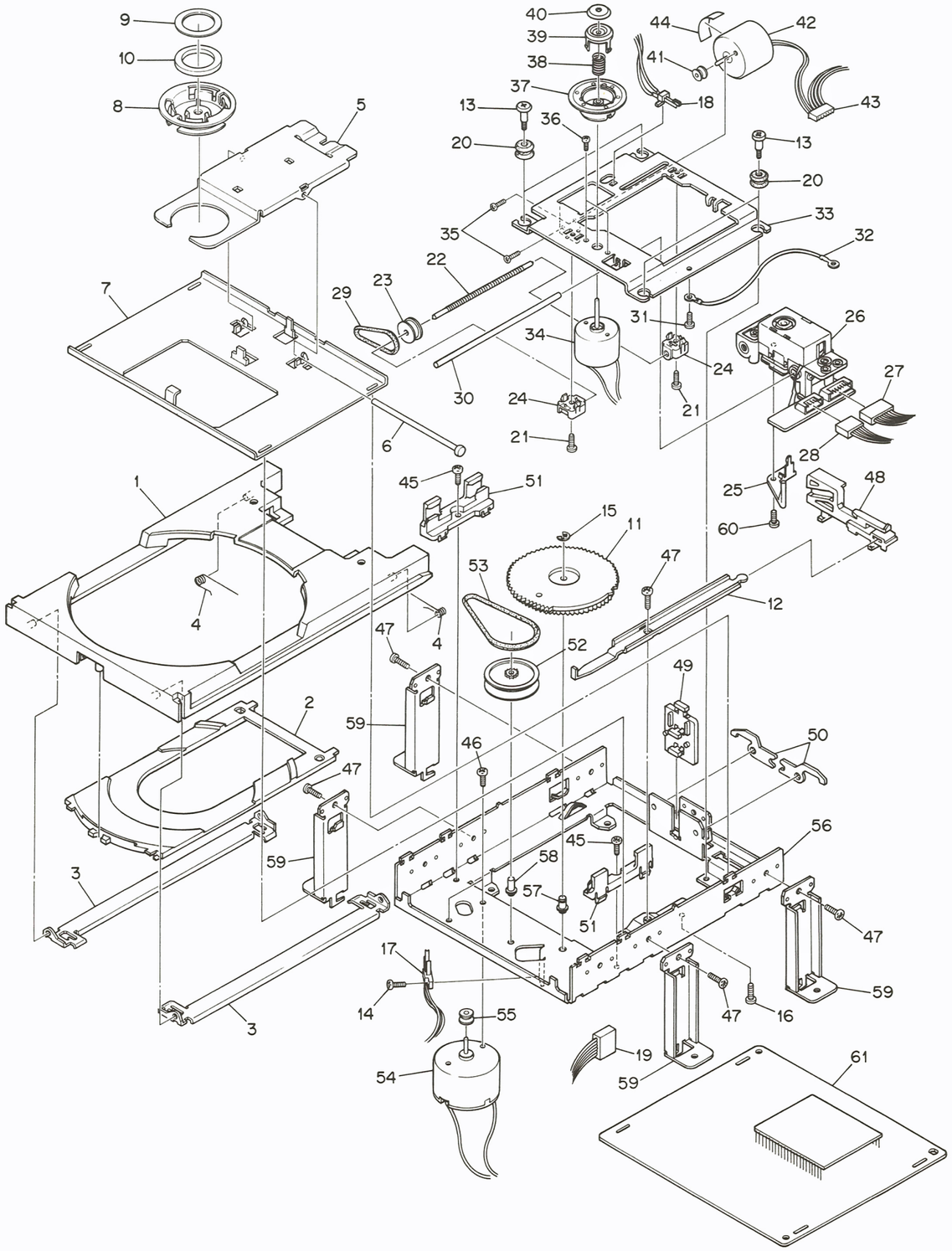
Explosionsdarstellung Chassis kpl.

Exploded view chassis assembly

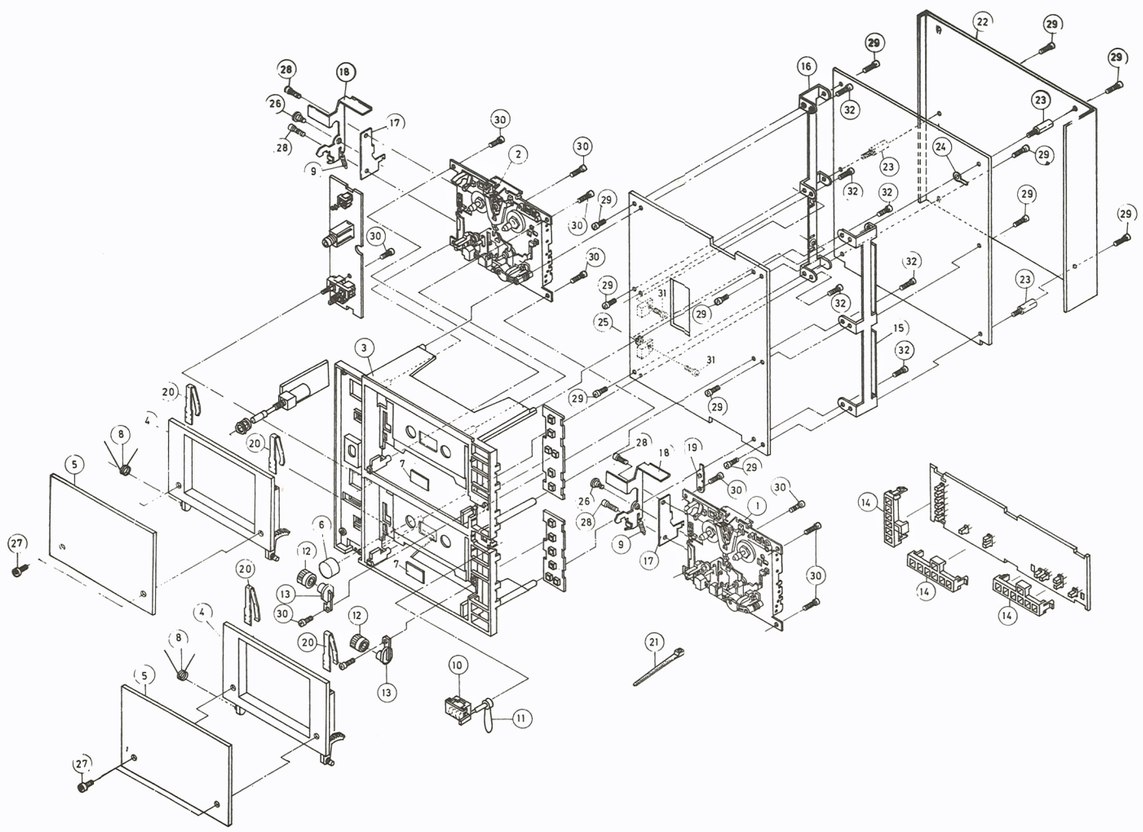
Explo-Index: A, B



Explosionsdarstellung CD-Mechanik
Exploded view CD mechanism
Explo-Index: DM



Explosionsdarstellung Cassette
Exploded view cassette
Explo-Index: CA



Ersatzteilliste Cassette/Cassettenmechanik
Spare parts list cassette/cassette mechanism

Best.-Nr. Part.-No.	Bezeichnung	Description	Position	Preisgruppe Price key
46 726 00	Cassettenfach A/B	Cassette case	CA 4	B 2
27 755 00	Cassettenfachdeckel Tape A	Cassette case window Tape A	CA 5A	B 4
47 175 00	Cassettenfachdeckel Tape B	Cassette case window Tape B	CA 5B	B 4
18 336 00	Drehknopf Record Level	Rotary knob Record Level	CA 6	A 3
46 727 00	Feder Cassettenfach	Cassette open spring	CA 8	A 2
24 432 00	Zugfeder Kopfschlitten	Tension spring headpanel	CA 9	A 0
46 728 00	Zählwerk B3BC-080-160-651	Tape counter B3BC-080-160-651	CA 10	B 4
05 846 00	Zählwerkriemen TDS 31	Belt tape counter	CA 11	A 8
40 790 00	Dämpfrad	Damper gear	CA 12	A 2
40 791 00	Dämpfradhalter	Damper holder	CA 13	A 2
47 231 00	Inbusschraube Cassettenfachdeckel	Screw cassette case window	CA 27	A 5
46 767 00	**Cassettenmechanik kpl. A/W CMAY6Z218A**	**Cassette deck Rec./PB CMAY6Z218A**	**CA 1**	**F 3**
46 768 00	**Cassettenmech. kpl. Wiederg. CMAY6Z219A**	**Cassette deck PB CMAY6Z219A**	**CA 2**	**F 2**
46 729 00	Zwischenrad/Idler	Idler	CM 1-1	A 8
46 730 00	Wickelmotor	Motor reel	CM 1-2	C 3
46 731 00	Wickelteller L/R	Base reel	CM 1-5	A 7
46 732 00	Relais	Solenoid	CM 1-6	C 1
46 733 00	A/W-Kopf HAYEH4405A	Head HAYEH4405A	CM 2-9	C 6
46 734 00	Löschkopf	Erase head	CM 2-10	B 8
46 735 00	Pulley Antriebsmotor	Pulley motor	CM 5-7	A 4
46 736 00	Antriebsmotor MMA-6D2LWFX	Motor main MMA-6D2LWFX	CM 5-8	D 1
46 737 00	Schalthebel Play	Arm Play (F)	CM 13	A 6
46 738 00	Gabelhebel	Lever hold (C)	CM 21	A 6
46 739 00	Kurvenrad	Gear cam (E)	CM 22	A 7
46 740 00	Antriebsriemen	Belt main	CM 23	A 8
46 741 00	Schwungmasse kpl.	Flywheel assembly	CM 31	B 6
46 742 00	Bandandruckrolle kpl.	Pinch roller	CM 33	B 0
46 743 00	Tipptaste Bandsorte/Record	Push switch tape Select/Record	CM 58-5	A 7
46 744 00	Schaltkontakt Play	Leaf switch Play	CM 58-6	A 8

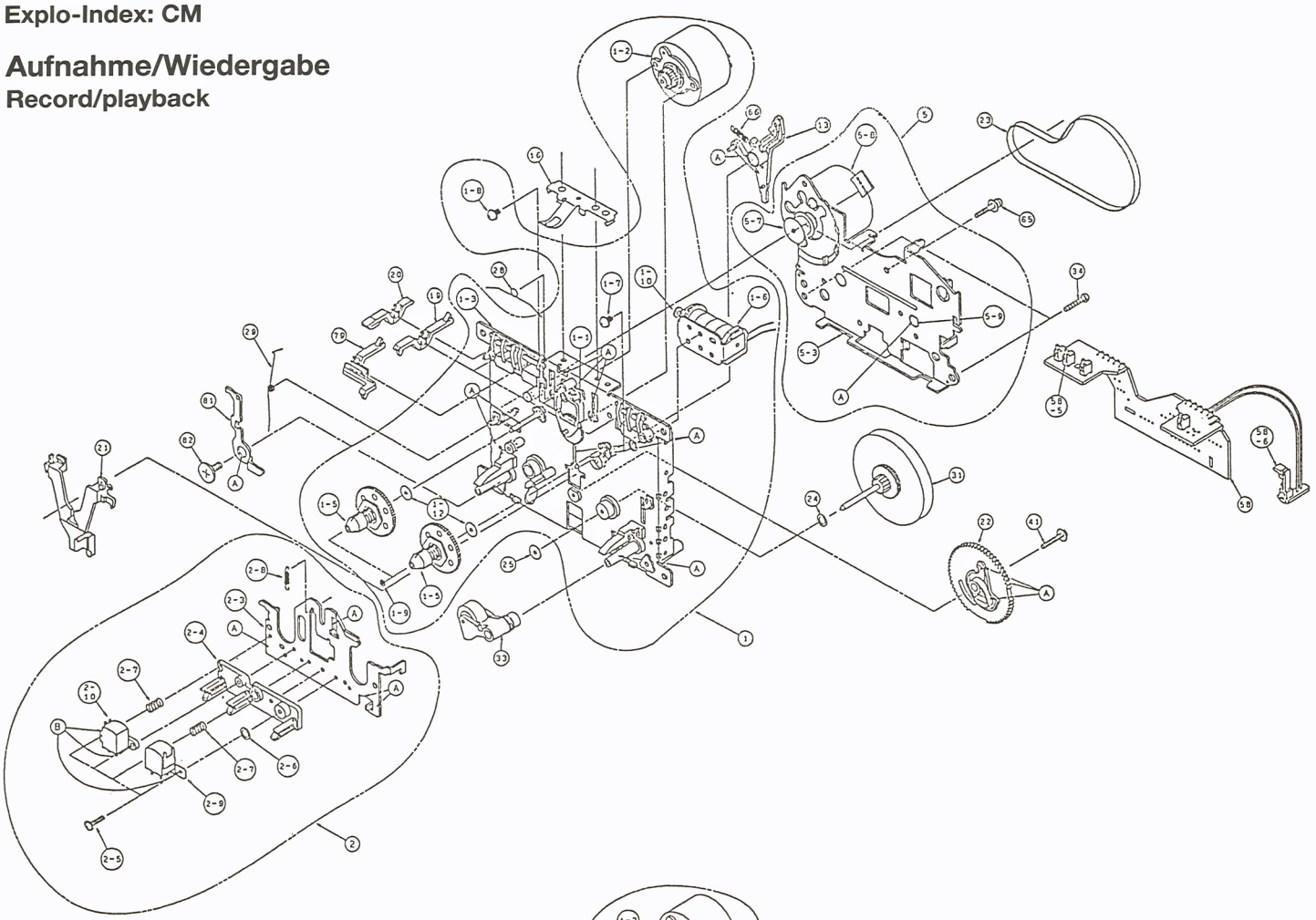
Explosionsdarstellung Cassetten-Mechanik

Exploded view cassette mechanism

Explo-Index: CM

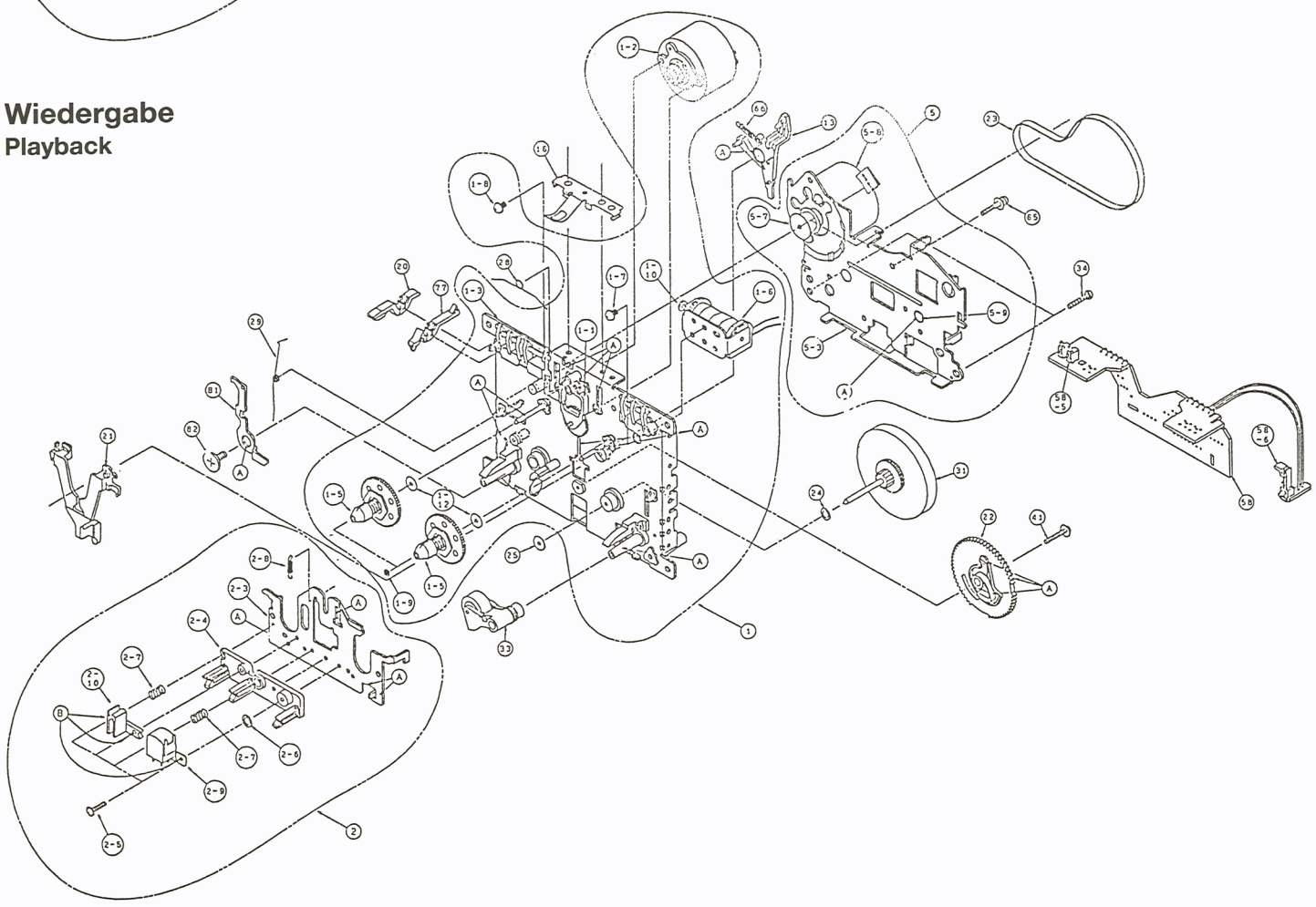
Aufnahme/Wiedergabe

Record/playback



Wiedergabe

Playback



Technische Änderungen vorbehalten.
Technical modifications reserved.